



Careers in Online Gaming

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Careers in Online Gaming

Occupation	Minimum Educational Requirement	2017 Median Pay
Advertising, promotions, and marketing manager	Bachelor's degree	\$129,380
Broadcast and sound engineering technician	Postsecondary education	\$42,650
Editor	Bachelor's degree	\$58,770
Film and video editor, and camera operator	Bachelor's degree	\$58,210
Multimedia artist and animator	Bachelor's degree	\$70,530
Musician and singer	No formal educational credential	\$26.95 per hour
Producer and director	Bachelor's degree	\$71,620
Software developer	Bachelor's degree	\$103,560
Writer and author	Bachelor's degree	\$61,820

Source: Bureau of Labor Statistics, *Occupational Outlook Handbook*, 2019. www.bls.gov.

experience doing different types of animation and design work. In an interview with Lifehacker, Bowler confirms the attractive but difficult nature of the field. "It's one of the most mentally stimulating and rewarding fields I've ever worked in," he says. "It's also caused me the most anxiety and stress. We work very, very hard making the stuff you love."

Although the industry is very competitive, there are ways to stand out among those vying for jobs. For example, when he was young, Dan Posluns programmed his own games on his TI-85 calculator and Apple IIc and went on to develop independent games and post them online. An established game studio noticed

Tester

What Does a Tester Do?

A video game tester's job is to play a game and look for flaws, such as glitches within the game, broken applications, or non-functioning visual effects. Testers probe all aspects of a game trying to find discrepancies or areas that perform slowly. The goal is to ensure that games meet certain standards and requirements and to fix any issues before the game is rolled out to the public. Game-testing work is also known as quality control inspection or quality assurance.

At a Glance

Tester

Minimum Educational Requirements

None required; high school degree preferred

Personal Qualities

Meticulous, focused, patient

Working Conditions

Indoors, in an office at a game studio or at home

Pay

Average salary of \$31,000

Number of Jobs

About 287,000 in 2016

Future Job Outlook

Projected 5 percent to 9 percent growth through 2026

Video game testers are typically assigned a specific part of a game, such as a fight scene between the player and a villain, and given a description of what is supposed to happen. Testers then perform several different functions, such as hitting the opponent or running away, as they search for bugs. "While playing *Terraria* (an open-world, endless game like *Minecraft*), our team of eight to ten guys used to sit together," explains Mitch, a former game tester, in an article published by Mashable. "Every person had to focus on one task: One had to dig iron only for days, the other had to dig gold, and likewise every guy had to focus on single tasks and test for days just to check for any issues."

Testers specifically check to see whether video games perform according to the designer's specifications and user's requirements. They also test the game's network performance, installation, and configuration. After they test these and other aspects of a game, testers write a report on their findings and send the game back to the programmers for revisions and corrections. The revised version of the game, known as a new game build, will then go back to the tester, and this process continues until all problems are fixed.

Spending one's day playing video games might sound ideal to some people, but professional video game testers admit that their workdays can get monotonous. The same aspect of a game often has to be tested over and over. For example, a tester might have to spend all day slamming into every wall in the latest *Call of Duty* to see if the wall stays in place. Or a fighting game may have twenty different characters with twenty levels, and the tester will need to play every character against every other character on every single level.

However, the benefits include getting to work on games that are interesting and being a part of a team that produces a high-quality final product. Successful testers find it exciting and challenging to test every little detail of a game, and they enjoy getting to be a part of the process. "My favorite part of the job was the ability to see how new games were made, everything from the planning process to the early stage of development to the final finished product," says Bayaar Lo-Borjigid, a former video game tester, in a 2017 article published on the Mental Floss website.

How Do You Become a Tester?

Education

Testing is an entry-level job in the game industry, so a degree is not typically required. However, a bachelor's degree will help those looking to move up in the quality assurance field or to earn higher pay have a better chance of doing so. Recommended degrees include those related to information systems, game design, or software development.

Understanding video games and learning about all aspects of them are the key to getting the experience needed to be a tester. Video game producer Aaron Roseman hires testers for his studio, Treyarch. In an interview on the website *Careers Out There*, he describes a tester's job as follows: "It's their job to break the game, crash the game, see what sort of weird graphical issues they can [cause to] occur, [make] sure that the lighting looks well, the characters don't run into walls, the game doesn't crash, that everything sounds well."

Industry experts like Roseman suggest that those who want to test video games should play several types of games, such as shooting games (which feature weapons), sports games, survival games (such as *Fortnite*), and puzzle games like *Words with Friends*. Instead of trying to win a game, students should focus on observing all the different details—tiny visual details, sounds, and the reactions of other characters or the environment to a player's actions. Students should also take note of how fast or slowly the game performs during different sections. For example, when playing in *Minecraft*, an aspiring tester could practice doing the same tasks, such as mining, jumping, and sprinting, as different skins (characters) to observe how the audio and visuals are different for each skin.

Certification and Licensing

No certification or licensing is required to be a tester. However, the Quality Assurance Institute offers certification for a software quality analyst. To earn this certification, one must pass an exam and fulfill other requirements, such as having a bachelor's degree from an accredited university and two years' experience working in the information services field or a two-year degree from an accredited university and four years' experience. This certification may help a tester who is looking to rise to the level of lead tester or to test a major game made by a large company.

Volunteer Work and Internships

Volunteering can be one path for those interested in breaking into video game testing. Volunteers might get in touch with an

indie studio and offer to test their games free of charge. Indie studios are typically small—sometimes they consist of just one or two employees—and thus cannot usually afford to pay a tester. Despite this, there is still work to be done. Offering to be a beta tester—that is, someone who tests a game when it is completed as opposed to testing the game throughout production—and testing a game for free “can be a good way for you to learn game testing *and* put some testing experience on your resume,” writes Jason Bay in “How to Become a Video Game Tester (FAQ)” on Game Industry Career Guide.

Skills and Personality

Video game testers need to be very detail-oriented people. They must enjoy focusing on the micro details—such as having a character walk through a forest and observe every tree to see if the trees are missing any leaves or are the correct color—as they do their work. They also need to have patience; they must often test the same areas of a game over and over again, continuously looking for errors, mistakes, and other out-of-place details.

Testers need to be able to keep their focus on the same project for a long time, even months or years, because most modern PC or console games take one to three years to complete. Testing continues after bugs and errors are found and fixed by programmers. “You need to have a good attention span, and not get bored of a game even after you’ve been testing it for a long time,” writes Bay. “And I mean, for a loooooong time—modern, triple-A games can take up to five years of development and testing before they’re released to the public.”

Finally, video game testers must be trustworthy and discreet. “Being a game tester, by definition, means working on a game that is not publicly available,” says former video game tester Mark Kaelin in a 2017 article published in TechRepublic. “In some cases, the game may even be a closely held secret. Successful game tester candidates must demonstrate the ability to keep a secret and honor non-disclosure agreements.”

Employers

Most game-testing jobs are located in the same cities where the large game studios are headquartered. Although the United States has the most gaming studios of any country, England, Canada, and Japan also are home to many game companies. Cities like Seattle, Montreal, Tokyo, and London offer several opportunities. “You may be able to find testing jobs in smaller towns and cities,” suggests Bay on Game Industry Career Guide. “But if you’re positive that you want to break into the game industry then you’ll have the best chances of finding work if you can move to one of the major cities for game development.”

Working Conditions

Testers generally do much of their work alone, especially while they are exploring the game builds, revised versions of the game that are updated as corrections are made. However, they often need to interact with designers (to better understand a game’s requirements) and programmers (to provide reports about what they found during their tests). They also may interact with other testers who are working on different aspects of the game.

Testers generally work in a quiet area, whether at home or in an office, because they need to concentrate on the game and its details. Often, they wear headphones compatible with the mobile device or computer so that they can zero in on the game’s sounds. The ability to stay focused is important because a game’s details are crucial to its success. For example, if a tester works on a section of a game for several hours and it crashes, he or she must be able to recall the exact last few moves or keystrokes entered and record this in the bug log.

Earnings

According to the job search engine Indeed, the average salary for a video game tester was \$39,637 per year in 2018. This was based on information the site received from employees, users,



A video game tester is involved in quality control. Testers search for programming glitches and other problems that would affect the user experience.

and past and present job advertisements in the previous thirty-six months. Similarly, PayScale reports that the average video game tester earns \$31,000 per year in the United States. Pay variations are based on location, a company's size, and how many years of experience a tester has.

Opportunities for Advancement

Game tester positions are considered entry level in the industry. Those who want to stay in testing might aim to be promoted to a lead or manager position. In addition to demonstrating their ability to perform quality tests, those who want to advance in this area need to be able to direct others.

However, many see the next step for a tester as moving over to a different area of the game industry, such as programming or producing. "The thing I dislike most is that it's incredibly hard to move one's career forward," says Lo-Borjiged of game testing. "To work your way out of testing you really, really have to stand out, and that is hard given how many other testers there can be from company to company." Lo-Borjiged knows this from

firsthand experience—he worked his way up from being a game tester to working on user interface design and eventually became chief executive officer of Skull Fire Games.

What Is the Future Outlook for Testers?

The demand for video game testers is closely related to the demand for video games themselves, which is on an upward trend. Additionally, as programming increasingly features the latest technology—such as virtual reality—there will be a greater need for testers because the games will have more details. In 2016 O*NET Resource Center reported that 287,000 people worked in software quality assurance, which includes video game testers. O*NET projects a growth of 5 percent to 9 percent in this area through 2026.

Find Out More

Quality Assurance Institute (QAI)

5728 Major Blvd., Suite 602
Orlando, FL 32819
website: www.qaiusa.com

The QAI provides instructor-led trainings, career programs, exam preparatory training, and certification for both individuals and organizations in quality assurance. Its website includes webinars on different quality assurance topics, including software testing, and information on its software testing certifications.

Software Test Professionals

4746 Desert Candle Dr.
Pueblo, CO 81001
website: www.softwaretestpro.com

Software Test Professionals is an online community that provides software testing information and networking. Its website offers

Interview with a Game Producer

Robert Dieterich owns a gaming company, Skyboy Games LLC. He develops and produces independent games and is contracted to port, or adapt, other developers' games from one platform (such as iOS) to another (like Android). Dieterich has over ten years' experience in the video game industry. The author spoke with him via phone about his career.

Q: Why did you become a game producer?

A: Getting the idea to go into game development did not even register as a possibility until in high school when I saw, in a magazine, an article about the game industry. Until then, I did not even know there was a career in games. I saw the article, and knew that was what I would like. After college graduation [with a degree in computer science], I moved to Japan to teach English for a year, and was a freelance programmer. My friend was a games journalist and invited me to a game industry event where I met a person who would eventually become my boss. His company was hiring programmers for games, and I told him I was a programmer.

I spent ten years as a game programmer and as a manager of programmers, working with a variety of platforms, as we went from console to mobile and Android games. Then, I came back to the United States to attend George Mason University for their master of arts game design program. Towards the end of the program, they asked if I'd be interested in teaching, and I became an adjunct professor while still a student, and then an assistant professor after graduation. While doing this, I started developing new games and porting the games of others through my company, Skyboy Games.

Other Jobs in Online Gaming

Assistant producer	Marketing manager
Associate creative director	Multimedia artist
Broadcast engineer	Musician
Chief executive officer of a game studio	Narrative copywriter
Contest designer	Project manager
Creative director	Server engineer
Customer support agent	Software developer
DevOps engineer	Sound designer
Digital media correspondent	System designer
Engine programmer	Technical artist
External producer	3-D modeler
Game recruiter	Translator
Lead programmer	User interface artist
Level editor	Video editor
Lighting artist	Voice actor

Editor's note: The US Department of Labor's Bureau of Labor Statistic provides information about hundreds of occupations. The agency's *Occupational Outlook Handbook* describes what these jobs entail, the work environment, education and skill requirements, pay, future outlook, and more. The *Occupational Outlook Handbook* may be accessed online at www.bls.gov/ooh.

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