

## **Tech jobs: No degree required?**

Silicon Valley salaries are on the rise. Again.

In 2013, the average technology worker there made \$196,000 a year, according to numbers compiled from the US Bureau of Labor Statistics, and that number is expected to increase this year. Tech salaries in the Valley have been on the rise for years, outpacing inflation, and attracting talent from around the globe. A similar salary-climb is evident in other tech hubs around the world.

Recently, mobile-gaming social network Weeby.com announced it would pay new software engineers roughly \$250,000 a year plus equity. Meanwhile, many positions, both in the Valley and in other tech hubs, such as Berlin, remain open and employers are often competing to fill them with the best technical talent.

Put this together and it's no surprise that university students the world over are questioning whether pursuing a four-year degree and/or a graduate degree is really the best way to get a piece of the pie. Could dropping out and enrolling in technical courses be a better way to fast track into a lucrative career?

BBC Capital polled a number of experts to get the inside scoop on the importance of a university degree in an increasingly tech-driven and salary-focused world — whether you're looking to work in Silicon Valley, London, Berlin or anywhere else in the industry. Below are edited excerpts.

**Scott Purcell, division manager at tech recruiter JobSpring Partners  
Silicon Valley:**

Companies are looking for passionate engineers that have very strong fundamentals and want a career in programming. If someone is just looking for a good salary and doesn't have a strong desire or passion to do programming, I would highly recommend getting a degree.

If you have a degree with a good grade point average (GPA) from a well-regarded university, you will have more doors open to you for interviews. If you are going to a less well-known university or a state school, the degree matters a lot less. Then employers care about things like internships, side projects and GPA. You are still one of many at that point and need to differentiate yourself in some way.

Consider that the top people in this industry are passionate about technology and programming, so if you are not, it will be tough to compete. If you are passionate about it, don't stop at university. Do your own side projects, get a GitHub account to display your skills, work internships, go to meet ups and network.

If you do these things, you will separate yourself from the masses that look at engineering as a safe career and do the minimum to get an average job that pays decently.

**Natalie Murray, technical recruiter with Demonware Inc in Vancouver, British Columbia:**

The general consensus among my peers is that a foundation degree in computer science is highly valuable. However, there are a number of senior engineers who I respect immensely who feel that it is not necessarily a predictor of success. As one told me: "Neither path guarantees your prospects ... you earn your future potential everyday of your career."

I have hired self-taught developers before who were very strong. However, most development managers emphasize a strong desire for a degree. I surveyed a number of senior engineers and some of the reasons they've cited in favour of a university education include: a good engineering degree is a good indicator for success; the specific languages and tools you use day-to-day as a programmer change quickly, but the fundamental principles do not. Good fundamentals can set you up for a decades-long career.

Some argue that the actual university and grades are less important than attitude. What is more telling is the initiative you showed (extra-curricular work and contributing to open source) and your attitude and passion (what you do with the opportunities you are given).

From a recruiting perspective, the other pro for having a degree is international mobility - most visas require a minimum degree of education to qualify (both in Canada and in Europe).

**Neil Matthams, senior recruitment professional at Talent International, Perth, Australia:**

If a student is serious about pursuing a career in IT, then undertaking a computer science degree beats dropping out and taking a technical programming course. Gaining an internship or graduate position at a Google, Apple or Facebook is now the equivalent of what getting an entry role at Goldman Sachs was 10 years ago. Google alone gets 50,000-plus CVs per week from all over the world and hires less than 0.2% of applicants. Thus, the absolute minimum requirement will be a strong degree from a leading university.

Of course there are examples of software programmers who have forged amazing careers without a degree. I've met many, but they would be the exception

rather than the rule. I would be surprised if the percentage of programmers without a degree at any major employer in Silicon Valley or London would be more than 10%.

**Rajesh Setty, author and serial entrepreneur, Silicon Valley:**

The short-term option of going through a technical course in lieu of university is attractive only in the short-term.

Today, there are no good options yet to bring what studying in a good university will bring to the table. These include things such as brand power of a good university, strong alumni network, interpersonal skills, friendships for life and diversity of thought.

Study at university and walk the extra mile of taking additional free courses on select Massively Online Open Courses (MOOCs) like Coursera and Udacity to get an edge.

**Jeremy Del-Guidici, CEO of digital entertainment recruiting firm VonChurch's European division, Berlin:**

In Europe, it seems a university's name has little bearing on an employer's decision to hire an engineer, much less so than the fields of banking and law. Employers want commercial experience in Europe above all, because most have immediate problems to solve, usually with more limited funding.

Hiring inexperienced engineers is often too much of a risk here, hence the reason many developers, especially in Germany, for example, take on low paid internships to get their foot in the door. This appears crazy when nearly 20,000 developer jobs across Germany will remain unfilled this year, but most companies have turned to the international market for solutions.

As important as commercial experience is in Europe, completing higher education is important. It carries some significant weight to have a PhD and Master degree level education in a computer science related course.

If a student drops out of university, it shows they are unlikely to stick it out in even a professional environment. It sends out all of the wrong messages, especially for start-ups who want their staff to stay as long as possible to avoid an unbalanced team and intellectual property going out the door. If a student drops out of higher education, they can also lack certain theoretical knowledge needed at a commercial level, discipline, and they limit their own chances to work abroad.