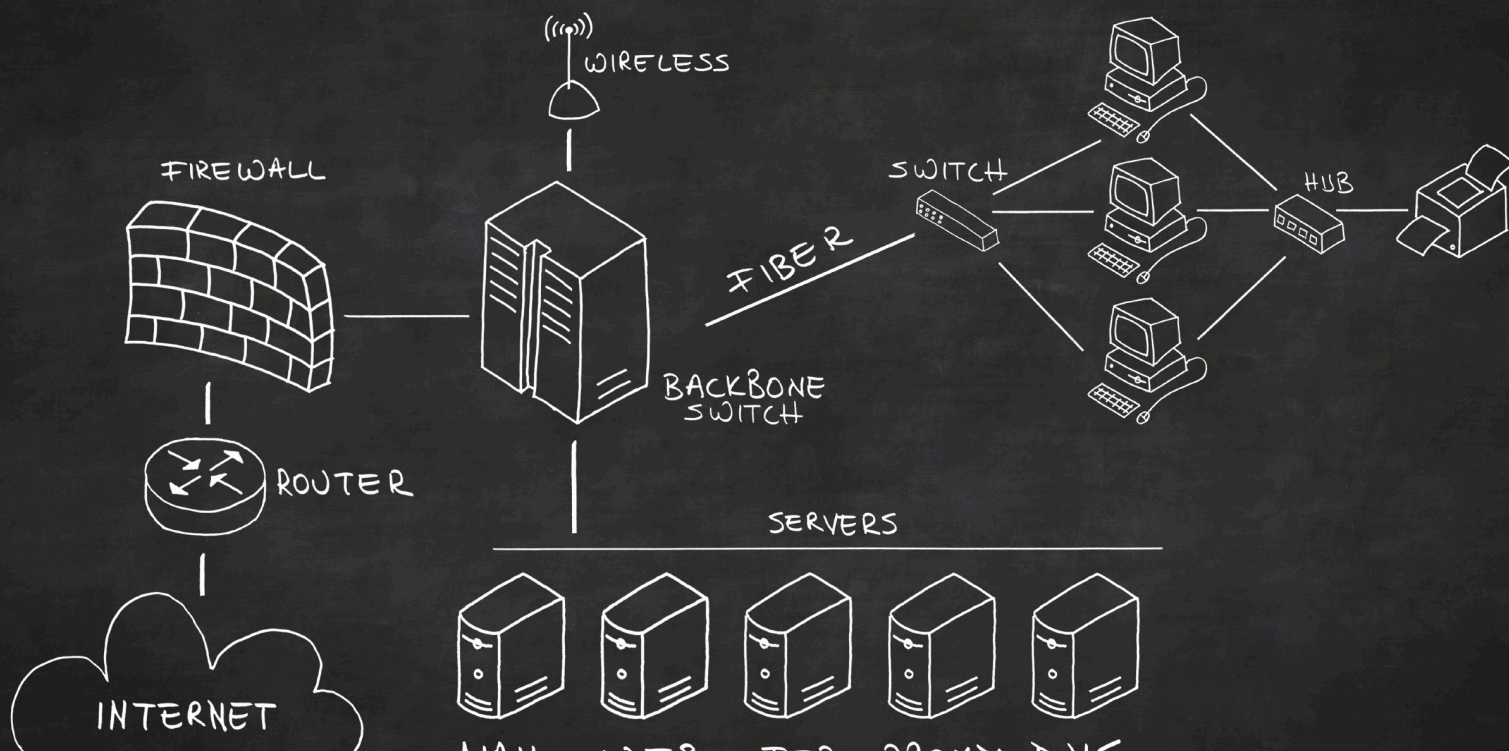


A man with dark hair, wearing a black button-down shirt and a purple tie, is shown in profile, working on a server rack. He is holding a silver server panel. The background shows a data center with multiple server racks, blue cables, and yellow vertical supports.

How to Pursue a Career in Information Technology

A QUICK REFERENCE GUIDE



From mission-critical business systems to e-commerce and the Internet, information technology is not only an industry in its own right but also a fundamental building block of many other industries. IT has become one of the most critical career fields in the 21st century economy. Nearly all businesses use computer systems and networks to one degree or another, which means there are a variety of industries that need IT specialists to build, maintain, protect, and repair these systems.

These and other factors are contributing to a surge in popularity of IT as a career path. Six of the roles ranked on U.S. News & World Report's list of The 25 Best Jobs of 2014 were IT-related positions (software developer, computer

systems analyst, Web developer, information security analyst, database administrator and IT manager), and some information technology arenas are among the fastest-growing for job opportunities, according to the Bureau of Labor Statistics' (BLS) Occupational Outlook Handbook.¹

HOW TO CHOOSE AN IT SPECIALIZATION

Being a jack of all trades but master of none can be helpful, but that approach doesn't always cut it when you're pursuing in-demand IT careers.

Many careers, especially those in information technology, require high levels of sophistication and specialization, so the more you have to offer in one specific area, the better. The trick is choosing an IT degree specialization best fits your goals and interests.

Once you've got it figured out and you've decided to pursue an IT degree, you can take classes directly related to your field of interest, equipping yourself for the real world and getting an edge over your peers by sharpening your knowledge and skills in the exact areas in which you want to work. Begin by exploring the four types of IT degrees below.



Digital Investigations

The Sherlock Holmes-style detectives of the modern era, digital forensics experts work closely with police officers and traditional detectives to solve cyber- and Web-related crimes.

Bringing together traditional incident response and digital forensics, skilled digital investigators are especially valuable to organizations who use cloud computing, because when hackers make a threat, it's increasing difficult to get to the root of the problem since there's no ownership or access to the physical servers and multiple databases are on the same platform. It takes a special eye to spot discrepancies and irregularities.

People who love solving puzzles by taking data, reconstructing it and analyzing where things could potentially go wrong are perfect for this specialization.

Information Assurance and Security

Melissa McCarthy's role in the movie "Identity Thief" made the situation of an innocent man getting his identity stolen an entertaining scenario, but in real life these scenarios are far from pleasant.

Safeguarding innocent people from hackers stealing their personal data, credit card numbers, and their hard-earned money is something corporations, governments and others take seriously, as is the ability to protect their own proprietary information.

Given the high demand for professionals trained in cyber security, it's not surprising that this is a high-growth field. According to the Bureau of Labor Statistics (BLS), the growth rate for information security analyst jobs is 37% through 2022.²

Network Administration

If a company's computer systems shut down—even for only an hour—things get chaotic. Communication across internal servers is lost, there is no data access for people to continue doing their jobs, customer contact data can't be accessed, and internal needs can't be processed.

Network and computer systems administrators are the sturdy, reliable backbone of the IT industry. They keep things running smoothly and allow everyone else in a company to do their jobs efficiently and without hang-ups.

These professionals ensure the day-to-day maintenance, operations and upkeep of computer systems, whether they're on localized servers or in the cloud. This means implementing reviews and updates of all hardware, software and system resources to keep problems at bay, as well as running analyses to diagnose and solve inefficiencies.

Network and computer systems administrators are expected to see an average year-over-year job growth of 12% through 2022, per the BLS.³

Software Analysis and Development

Software developers, engineers and programmers are the creative brains behind the technology people use every day, including business software, document creation, data entry interfaces, mobile applications and more.

Programmers write the code that makes software work and are usually the ones who love to solve logic puzzles. The BLS estimates job growth at a pretty steady 8%.⁴ Meanwhile, software developers create the structure for apps and computer



programs. They're the source of creativity for how different features and functions work together. Job growth in this field is expected to be 22% through 2022, much faster than average.⁵

HOW TO POSITION YOURSELF FOR SUCCESS IN IT CAREERS

When you think of today's most successful companies, you probably think of Apple, Google and Facebook—tech giants. While these are some of world's most lucrative and successful brands, they are not alone in reaping the riches of today's information technology industry. As technological advancements continue to be made, the industry as a whole continues to grow and offer a broad variety of IT career opportunities for interested and dedicated individuals.

Below, a few leaders in various kinds of information technology jobs offer their insights on the evolution of the industry as well as their advice to those considering IT careers.

Become a Good Communicator

"While technical support has become a commodity over the years, the partnership between small businesses and their trusted IT service providers has remained invaluable. If you're just starting out in IT services, my recommendation is to not only focus on your technical studies, but to increase your personal communication skills.

"We see a lot of applicants that look great on paper, but when we meet with them they're unable to

relay technical information to nontechnical people in an empathetic and understandable way. IT is as much about client services as it is about technical knowledge, and those that communicate effectively move forward with greater ease."

- Eric Schlissel, CEO at GeekTek IT Services in Los Angeles

Learn Your Craft

"One of the largest changes over the past several years is the ability for clients to have access to their information, run programs and work from anywhere at any time. This requires IT professionals to be able to do the same in order to quickly assess and resolve issues. We must be mobile and have the tools and availability to work with our clients wherever they may be when they are experiencing an issue. In addition, with every change in the industry comes new security risks and challenges for protecting our clients' data.

"My advice for someone that is interested in pursuing an information technology career is to learn the basics of how everything works and put it to practice. Students need to decide if they want to be a jack of all trades or focus on an individual subject in the field. You can either learn everything there is about a certain field or learn a little bit about everything."

- Ryan Zegers, partner at Sierra Technology & Consulting in Reno, Nev.



Practice Your People Skills

"In some ways the industry and roles have stayed the same – there are still programmers, just with different languages than 20 years ago. However, technology has changed dramatically and continues to change. More things are automated today, code is reusable and there are tools that make everything technical easier.

"One of the biggest changes I have seen is that there is no such thing as a 'back-room' position in IT anymore. No matter what your position, you are expected to be able to interact and communicate reasonably effectively with the business. There are also less formal ways to break into technology as a career or get your next role than there maybe were several years ago."

-Tracy Cashman, senior vice president / partner at WinterWyman in Boston

Make Your Own Experience

"IT touches every business unit and sets technology foundations that are as vital as a building's foundation. Growing businesses must take a long-term view when evaluating IT investments.

"If one is interested in pursuing a job in IT, I recommend narrowing your focus to a specific area, such as infrastructure, systems, security or networks, when pursuing formal study. Nothing beats learning in your own playground, so set up your own IT infrastructure at home. If you enjoy solving puzzles and problems, you will probably enjoy working in IT."

- Sue Spanovich, manager of Information Technology at Code42 in Minneapolis

[This guide is presented by American InterContinental University \(AIU\). Learn more about our IT degree programs.](#)

¹ <http://money.usnews.com/money/careers/slideshows/the-25-best-jobs-of-2014> Retrieved 11.21.14

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² <http://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm>. Retrieved 10.21.14

³ <http://www.bls.gov/ooh/computer-and-information-technology/network-and-computer-systems-administrators.htm>. Retrieved 10.21.14

⁴ <http://www.bls.gov/ooh/computer-and-information-technology/computer-programmers.htm>. Retrieved 10.21.14

⁵ <http://www.bls.gov/ooh/computer-and-information-technology/software-developers.htm>. Retrieved 10.21.14