

An IT Department

An IT department can consist of employees covering the roles described hereunder. Not all IT departments will have all of these roles. An IT department will only serve the needs of the company for whom it is giving service.

Systems analyst

A systems analyst has the responsibility of managing the building of an IT system. Very often the IT system will replace an old one.

The principal roles of the systems analyst.

- a) Studies the old system and propose a new system/s. Assesses the IT needs of the client and suggests hardware and software solutions for those needs.
- b) Design the new system and manage programmers in developing the code for it.
- c) Act as liaison between customers, IT persons, and stakeholders during the development of the system.
- d) Decides time and mode to train the users for the new system.
- e) Plans a method of passage between the old and the new system.
- f) Manages the writing of documentation that will serve eventual modification, upgrade and debugging.

To perform their job, system analysts have to be:

- a) Proficient in programming languages knowledge and skills.
- b) Knowledgeable in hardware solutions.
- c) Familiar in multiple operating systems.

Programmer

The principal roles of a programmer are the following:

- Designing and creating software programs (both applications and systems software)
- Integrating systems and software
- Analysing algorithms
- Modifying source-code
- Debugging
- Reviewing and updating existing programs
- Generating reports

- Mitigating potential risk
- Troubleshooting system errors
- Managing database systems
- Providing tech support

The programmer has to possess:

- Expertise in the craft of programming (Java, C++, SQL, C#, and HTML experience)
- High concentration levels
- Good task management
- Problem solving and critical thinking skills
- Aptitude for maths
- Aptitude for learning new technology

IT Trainer

Job responsibilities:

- Conducting IT skills gap analyses among employees
- Designing technical manuals using simple language
- Prepares training programs
- Teach security techniques to employees
- Research and recommend learning systems
- Train new employees on proper use of hardware and software
- Evaluate the effectiveness of each educational session
- Maintain updated records of training curriculum and materials

Requirements

- Familiarity with web-based learning platforms and modern educational techniques
- Good understanding of corporate computer security principles
- Excellent communication skills with the ability to explain technical terms plainly
- Be knowledgeable in the main computer languages and/or application programs

Data Entry Clerk

Responsibilities include:

- Transferring data from paper formats into computer files or database systems using keyboards, data recorders or optical scanners
- Typing in data provided directly from customers
- Creating spreadsheets with large numbers of figures without mistakes
- Verify data by comparing it to source documents
- Update existing data
- Perform regular backups to ensure data preservation
- Sort and organize paperwork after entering data to ensure it is not lost

Requirements

- Computer savvy
- Fast typist
- With a keen eye for detail
- Understanding of data confidentiality principles
- Knowledge of word processor, spreadsheet and database
- Working knowledge of office equipment and computer hardware and peripheral devices

Web Master

Webmasters play a crucial role in the building and maintaining of websites.

The job consists of:

- Ensuring that servers remain up and running
- Webpages load quickly and effortlessly
- Coordinate the design, development, deployment and maintenance of a company's online presence.
- Responsible for web developers and graphic artists that work in their department.
- Oversee all aspects of creating a website.
- Registering domain names
- Designing logos and company intros
- Correcting software bugs
- Tracking traffic
- Dealing with search engine optimisation

- Maintaining security to prevent hacking
- They work with communication, sales, marketing or advertising professionals concerning content posted, viewed or pulled from the website.
- They ensure that information posted on the website is credible, correct, and up to date.
- Managing project timeline

Requirements:

- A good working knowledge of HTML, CSS, XML and Unix.
- Skills in C++ or Java would also be useful.
- Have to be technically savvy.
- Leadership skills
- Planning and time management skills
- Knowledgeable in SEO (search engine optimization) techniques and web development knowledge and skills
- Outstanding programming skills
- Internet and web expertise

Computer Technician

Job consists of:

- Maintaining computer systems
- Troubleshooting
- Maintaining internet connectivity
- Running diagnostic tests
- Maintaining servers
- Repairing computer hardware
- Providing technical support.
- Configuring software and drivers
- Installing software patches
- Resolving hard disk failures
- Performing system upgrades

Requirements

- Problem-solving skills
- Extensive technical knowledge
- Communication skills
- Good task management

- Critical thinking skills

Computer Engineer

Responsibilities:

- Manage and design the computer hardware and software systems.
- Specialize in hardware or software
- Developing software systems
- Updating hardware
- Design new equipment.
- Testing, and inspecting all software used within the company.
- Perform periodic hardware analysis of computer equipment using available testing tools.
- Technical support to all staff members.
- Oversee the company's cloud storage accounts to guarantee they're protected and secure.
- Conduct validation testing for new and renovated motherboards.
- Ensure existing computer equipment are up-to-date.
- Stay up-to-date with the latest technologies and incorporate new technology into existing units.

Requirements

- In-depth knowledge of design analytics, algorithms, analysis tools, and object orientated modelling.
- Critical and creative thinkers
- Communication skills
- Problem-solving skills.