



### **Programming Occupational Outlook**

Programmers are categorised as either application programmers or system programmers. Application programmers develop or modify programs for a specific purpose, such as recording a companies' inventory. System programmers work in a much broader field, developing computer, networking, and operating systems. These types of programmers alter the instructions given to networks and other system units to enable them to effectively communicate with other hardware equipment, including disk drives and terminals. System programmers have a fundamental knowledge of the whole systems, enabling them to resolve programming problems that application programmers often face. Presently, the most common form of programming in the computer services industry occurs for the rising popularity of software packages.

In 2010, computer programs accounted for more than one third of jobs in UK. Most industries employ programmers, but the greater numbers are found in software publishing and systems design service industries. Many telecommunications, manufacturing, management, educational, governmental, and financial firms employ a large amount of programmers as well.

### **Job Description and Responsibilities**

After achieving a programming qualification and necessary skills, a computer programmer is often involved with projects such as:

- Writing, testing, and maintaining detailed instructions to run computer programs
- Testing logical structures to solve computer-related problems
- Writing programs according to computer programming specifications determined by software analysts
- Designing logical series of instructions for computers to follow
- Developing scientific and business applications
- Learning a variety of computer programming languages
- Group working with software development firms to develop packaged software

BCE programming course allow candidates to explore a variety of computer programming languages, which help immensely when looking for employment. Also someone who has knowledge of more than one subject is far more exposed and proves their programming techniques are broad and skilful.

### **Programming Career Options**

Computer programming training lays the foundation for a variety of career options for prospective computer programmers, research analysts, and database administrators. The most common career tracks for qualified candidates include:

- Software Developer
- Junior Programmer
- Analyst Programmer
- Computer Software Engineer
- Computer System Analyst
- Computer Operator
- Applications Programmer

- Systems Programmer
- Programming Instructor
- Software Administrator
- Senior Analyst Programmer

Application programmers help to write programs that can track and handle a specific job or task. They are often involved with revising existing software, and adapting technology and computer group programs to suit the specific business or industry. System programmers work on operating systems instead, and must learn computer programming that provides instructions for creating networks, communicating with hardware, and other database administration tasks. The Advanced Diploma in programming may be required for programmers who need to extend their skills.

### **Employment Prospects after**

The demand for qualified and professional computer programmers is constantly rising, and employment for programmers is expected to rise as fast as average through 2025. Average salaries of the majority of computer programming jobs range between £30,000 to upward of £50,000.

Keeping up-to-date with the latest technology offer the most prospects for advancement within the programming field. After gaining experience through formal computer programming, many candidates choose to specialise knowledge and experience by pursuing research, development, Internet marketing, or open up their own software development business. Gaining experience in specific programming areas is an advantage to this competitive industry. Candidates can practice writing software and post it on the Internet, for example, [www.SourceForge.net](http://www.SourceForge.net)