Business & Computing Examinations (BCE)
LONDON (UK)

BCE Programme Strategy

Content

1. Programmes Recognition

BCE is working to develop a fair, accurate and reliable programmes recognition process. This process can help employers understand how our programmes, knowledge and skills compare to international standards. It can also help learners find jobs sooner—or identify if one needs additional training or experience before they can work in a chosen profession.

With globalisation, it means more and more people are moving from one country to another. Programme holders often have difficulty finding jobs in other parts of the world because their programmes aren't recognised by employers. More and more developing countries have growing economies and expanding job markets – employers and communities are looking for workers in many different areas from all over the world. BCE programmes are practical and implement cutting-edge programmes that can help learners find the perfect employment fit. Our aim is to ensure learners have the skills, training and knowledge needed. We regularly engage organisations in order to get updates on industry requirements and incorporate these when designing, reviewing or amending our programmes.

There are a number of other programmes and services that helps improve our programmes:
- Working with regulatory authorities, sector skills and private organisations
- Learner workplacement
- Progression routes into further education
- Overcoming skills shortages

We strongly believe our Programme Strategy reflects the needs of the Computing, Business and Hospitality industries. We will continue to work with UK and international employers to improve training skills, techniques and employability skills (literacy, critical and creative thinking, problem solving).

2.   BCE Business and Computing Programmes Strategy

BCE programmes strategy mechanism delivers employer-driven skills. We focus on outcomes that promote skills that will enable learners to be successful in the workplace; literacy, critical/creative thinking, problem-solving, technology and communication skills.

BCE vision "*to build an internationally respected Awarding Organisation which gives candidates the capabilities to move successfully into further education or work as confident and responsible citizens*".

BCE mission *"to provide high quality, rigorous, viable and recognised international professional programmes".*

2.1   Aim of BCE Programmes

The aim of BCE programmes is to help learners develop sufficient knowledge and the lifelong learning patterns they need to live and work effectively in a business industrial oriented society. To achieve this, the specification provides a framework for learners to learn how to solve different business problems using different platforms i.e. Computing (hardware and software) and Business (outsourcing, research and strategy).

BCE programmes are foundations upon which learners build an understanding of Computing (Information Technology, Computer Science, Networking, Web Design, Graphic Design, Programming and Database); Business (Accounting, Administration, Project Management, Economics, Management, Human Resource, Marketing, Finance, and Administrative); Hospitality (Hotel Management and Travel & Tourism) concepts and their applications.

[see Accreditation Handbook page 1; Section 1.1 and 1.2 for BCE Objectives and Programmes Aim]

BCE programmes are divided into three:
- **Business**
- **Computing**
- **Hospitality**

2.1.1   BCE Business Programmes
1. Accounting
2. Business Administration
3. Project Management
4. Business Economics
5. Management
6. Human Resource Management
7. Marketing
8. Finance
9. Administrative / Secretarial

Forget the cynics, a Business programme is important. The role of business is to make the world a better place for everyone - creating wealth and well-being, prosperity, jobs and choices.

There is a strong argument that in the future, everyone will need to have had a business education. Whatever you do in your professional life, the chances are that it will involve some form of '*business*'. Scientists, engineers, even artists, will inevitably have to understand at least the basics of business, and probably a lot more.

Services are essential to every British business, either as a core activity or as a support to the core activities. Business services can be internally or externally provided to an organisation. Business services are those activities which bind an organisation together, enable it to function and connect it to its customers and community. As such, 'Business Services' represents both an industry sector (comprising those firms which provide a business service to other companies) and an occupational grouping (comprising those workers in all industries who are providing a business service within their own organisation).

Our mandate is to enable learners in developing individual potential and to acquire the knowledge, skills, and attitudes needed to contribute to a healthy society and a prosperous and sustainable economy. To develop an effective and prosperous economy, UK and the rest of the world require people who understand economics, administration, accountancy, financial services, administrative issues, management, marketing and business principles and possess the creativity and skills to apply them in inventive ways.

2.1.1.1 Accounting Programme Aim

An accounting department of any given organisation play an important role in managing money, gathering payments, collecting receivables, paying bills and utilities on time and ensuring the organisation keeps a positive net worth value. Accountants often set goals and objectives for the entire organisation to ensure the business performs the best possible accounting practices at any given time. These objectives and goals may differ for each given organisation.

Action plans detailing the requirements needed to achieve the vision and aims of the Accounting Programme:

1. Highlighting why accounting is one discipline of study that all people, regardless of job position, *should have some knowledge of.*
2. Outlining how Accounting concepts can be applied to all job specialities, how its importance has been promoted in recent years, and its usefulness in people's everyday lives.
3. Exploring the reasons why all business programme holders should have some background knowledge in accounting; underlining how in recent years, people in the business world have been held more accountable for their financial practices than ever before.
4. Outlining Accounting as the most basic framework of business.
5. Highlighting how people use Accounting in their daily lives i.e. to make investment decisions, assess interest rates to pay off their house mortgages, and calculate rates for car payments.

2.1.1.2 Business Administration Programme Aim

Business Administration apply business concepts and theories to real-world decision-making; increase proficiency in specific business disciplines; such as human resources management, operations management, marketing, accounting, statistics, economics, finance, and business law; develop and improve business skills in communication, technology, quantitative reasoning, and teamwork; observe and participate in business operations and decision-making.

All BCE Business Administration programmes incorporate "Information Technology/Information System" as computing knowledge is vital for effective administration. The design of the Business Administration programme:

- Incorporates ICT to meet today's digital information technology and promote effective administration.
- Highlights the importance of Business skills to the UK economy.
- Includes a range of levels covering higher CREDIT FRAMEWORK Levels 4, 5 and 6.
- Analyses technology and globalisation effects.
- Reinforces observable and measurable abilities which fulfil industry and employer needs.
- Support strategies which promote knowledge and value business skills.
- Represents a programme based on researched employer and learners needs.

Action plans detailing the requirements needed to achieve the vision and aims of the Business Administration Programme:

1. Outling the concept of business administration in the process of managing every different angle of a business so it can run, expand, grow and succeed. Without business administration, all areas of the business would go unmonitored and would eventually break down.
2. Highlighting how in every business, there is usually a team or department of business administrators and their job is to monitor and manage every aspect of the business to ensure the business has its best chance of succeeding.
3. Outlining the concept of business administration in overseeing the running of the organisation and working to ensure the business is working, running to its best ability.
4. Expanding on the importance of business administration, exploring how in order for a business to run properly and to be successful, every aspect of the business needs to work. In order for this to take place, business administrators should monitor, manage and assess each element of the business, keeping records and analysing each department's information on a regular basis to ensure everything is running according to plan.

5. Highlighting how business administrators usually are the ones to make large important business decisions which is of course, again, exceptionally important, as business would very likely fail without a good business administration team.
6. Analysing the process of business administration in overseeing and controlling of a business. This includes keeping a lot of records, monitoring and overseeing every department and staffing and managing employees.

2.1.1.3 Project Management Programme Aim

Project Management profession play an important strategic role in contemporary organisations. Given this prominence, executives have a vested interest in assessing how resources and activities will be used to meet project goals and objectives.

The design of the Project Management programme:
- Outlines and highlights the importance of project management in organisations.
- Analyses the implementation of quality and risk management.
- Highlights the skills, attributes, abilities and qualities of project managers.
- Recognises the importance of business analysis.

Action plans detailing the requirements needed to achieve the vision and aims of the Project Management Programme:
1. **Cost-Effectiveness** - Project management provides a roadmap for the journey of success, in that it is the greatest resource that allows the manager to understand the available assets, means and the methods to achieve the demands.
2. **Better Productivity** - Project management keeps the quality of products in constant check, thus ensuring better productivity in terms of quality and quantity. This not only helps the organisation in earning goodwill for a lifetime, but also promises customer satisfaction.
3. **Minimisation of Risks** - Every business is faced with risks or losses due to various reasons. However, with a strategy in place, gauging the risks and making diversions is easier. Project management helps in identification of loopholes and potential threats.
4. **Accomplishing Predetermined Goals** - Every organisation sketches its goals and objectives, which is the basis of earning profits and making a way towards growth. Project management is the key tool for achieving predetermined targets in a structured way as it decides the strategies that will be used to reach the goal in the fastest way.
5. **Project Management Plan** - Project management goes through fives stages which are; *initiation*, *planning and design*, *executing*, *monitoring and controlling*, *closing and project control systems*.
6. **Painting a clear picture of what is available, what is required and what is the way to get there** - Project management in organisations is seen through quality of products, customer satisfaction, employee satisfaction, efficiency in business, mitigation of risks involved and a successful business in totality.

2.1.1.4 Business Economics Programme Aim

Every business enterprise has certain objectives which regulate and generate its activities. These are: (i) Economic objectives - business is basically an economic activity. Therefore, its primary objectives are economic in nature. (ii) Social objectives - business does not exist in a vacuum. It is a part of society. It cannot survive and grow without the support of society. Business must therefore discharge social responsibilities in addition to earning profits. (iii) Human objectives - business is run by people and for people. Labour is a valuable human element in business. Human objectives of business are concerned with the well-being of labour. These objectives help in achieving economic and social objectives of business. (iv) National objectives - including; optimum utilisation of resources (business should use the nation's resources in the best possible manner); national self-reliance (it is the duty of business to help the government in increasing experts and in reducing dependence on imports. This will help a country to achieve economic independence).

Action plans detailing the requirements needed to achieve the vision and aims of the Business Economics Programme:
1. Developing insight into critical business topics such as strategic competition, the internal organisation of firms, and international issues facing businesses in the changing global marketplace.
2. Outlining on how Business Economics combines economic theories with the field of business administration.

3. Highlighting how Business Economics is concerned with how decisions are made, how the resources of a nation or business are allocated and utilised in the production of goods and services, and how the rewards of these activities are distributed.
4. Exploring how the programme integrates aspects of economics and business studies, focusing on the use of economic analysis and statistical methods to deal effectively with management problems in practical business fields.
5. Applying economic theory to business/management to familiarise learners with the analytical and decision-making techniques used in the business world and with the public and private institutional environments within which businesses operate.

2.1.1.5 Management Programme Aim
The main objectives of management are to: (i) increasing organisational effectiveness; (ii) achieve optimum utilisation of various resources; (iii) to have co-ordination between various department in the organisation; (iv) to have co-ordination between various agencies and organisation; (v) to control the material quality; (vi) to reduce the execution time for various activities of the organisation; (vii) to control the quality of workmanship; (viii) to manage and control economy execution.

Every organisation requires management personnel for it to function well, hence BCE ensures Management programme:
- promotes innovation and creativity
- meets industry and employer needs

Action plans detailing the requirements needed to achieve the vision and aims of the Management Programme:
1. Outlining how management influences all the phases of modern organisations; e.g. how Sales Managers maintain a sales force that markets goods; how Personnel Managers provide organisations with a competent and productive workforce and how Plant Managers run manufacturing operations that produce the clothes we wear, the food we eat, and the cars we drive.
2. Expanding on how society could never exist as we know it today nor improve without a steady stream of management to provide guidance in organisations. The well known management author Peter Drucker highlighted this point when he said that *Effective Management* is probably the main resource of developed countries and the most needed resource of developing ones.
3. Identifying the role of Management in moving an organisation towards its purposes or goals by assigning activities that organisation staff members perform.
4. Analysing the five functions of management; **planning**, **organising**, **leading**, **co-ordinating** and **controlling**.
5. Instilling management strategies, conceptual, human, technical, diagnostic and political skills.

Management is efficiency in climbing the ladder of success; leadership determines whether the ladder is leaning against the right wall.

2.1.1.6 Human Resource Programme Aim
Human resources is defined as the total knowledge, skills, creative abilities, talents and aptitudes of an organisation's workforce, as well as the values, attitudes, approaches and beliefs of the individuals involved in the affairs of the organisation. It is the total sum or aggregate of inherent abilities, acquired knowledge and skills represented by the talents and aptitudes of the persons employed in the organisation. The human resources department has many responsibilities within an organisation; including: training and development; recruitment; employee relations; overseeing benefits and employee assistance programmes.

Action plans detailing the requirements needed to achieve the vision and aims of the Human Resource Programme:
1. Outlining the Human Resources department responsibilities in an organisation.
2. Highlighting the HR department roles in:
- The process of recruiting suitable candidates for the organisation.
- Identifying and meeting the training needs of existing staff.
- Ensuring employee welfare and employee relations are positive.
- Ensuring the working environment is safe for employees.
- Raising awareness of current workplace legislation.

2.1.1.7 Marketing Programme Aim

Marketing, is the secret sauce that ultimately determines whether an organisation stands a reasonable chance of achieving success or whether it will blow another budget; failing to better communicate or motivate the consumer. Many companies have essentially the same overarching goals: *corporate growth*; *market share*; *return on sales*; *earnings per share growth* and *reputation*.

The design of the Marketing programme focuses on how:
1. Customer service impacts every organisation regulation, hence each sector views it as a "strategic tool".
2. ICT has even pushed customer service to the forefront as more people than before contact the help desk for issues ranging from households to information systems.
3. Customer service knowledge can easily be applied from one sector to another.
4. Marketing can offer many opportunities in a variety of fields, hence BCE ensures:
   - Programme addresses new areas of marketing specialisation e.g. digital market, personal branding, ecommerce.
   - Programme incorporates today's digital marketing technology.
   - Programme highlights new marketing channels including internet and web.
   - Programme incorporates employer and industry needs and requirements.
5. Sales positions involve meeting with customers, creating and implementing effective campaigns, hence BCE ensures:
   - Programme promotes quality assurance.
   - Programme incorporates industry needs and requirements.
   - Programme highlights industry skills.
   - Programme promotes both consumer and business to business selling.

Action plans detailing the requirements needed to achieve the vision and aims of the Marketing Programme:
1. Outlining the functions of marketing.
2. Exploring how marketing communication creates "top of mind" awareness.
3. Identifying effective ways of promoting business.
4. Exploring methods of getting recognition and attention of target audience.
5. Formulating brand recognition.
6. Improving business profits by boosting sales.

2.1.1.8 Finance Programme Aim

A finance department is the lifeblood of a business. Often led by Chief Financial Officer, this department typically focuses on providing accurate financial information (senior managers need to understand the financial implications of every boardroom decision); promoting innovation, mitigating business risks, enhancing transparency and identifying business opportunities. Other activities include: building relationships; compliance and promoting teamwork.

Action plans detailing the requirements needed to achieve the vision and aims of the Finance Programme:
1. Highlighting why finance is important for business organisations, the role of a healthy economy and its impact to everyone.
2. Identifying how finance includes planning of financial resources, making of optimum capital structure and effective utilisation of financial resources by deep analysis of cost of capital and capital budgeting tools.
3. Describing how finance plays a vital role for progress of corporate organisations.
4. Outlining how share market's fluctuation, government policies and strategy, economic changes and other changes in business environment can only be analysed with the help of finance.
5. Formulating why finance is not segmented from other functions in the organisation.
6. Explaining why the 2008 recession occurred and why the impact will be felt for many years.

2.1.1.9 Administrative/Secretarial Programme Aim

An Administrative Assistant/Secretary has many goals, from handling the routine tasks that once were those of managers and other higher-level staff members; to training new employees. Due to the increase of technology in the 21st century, many Administrative Assistants/Secretaries are virtual polymaths, handling myriad organisational affairs, all from a computer chair or even at home. The primary objective of an Administrative Assistant/Secretary is to ensure a organisation runs smoothly and efficiently, and the Administrative Assistant/Secretary reaches this objective through assuring the achievement of many other goals; including:

relieve higher-level staff of responsibilities; manage information; handle office equipment and orientation incoming staff members.

Action plans detailing the requirements needed to achieve the vision and aims of the Administrative / Secretarial Programme:
1.   Expanding on why corporations and professional service firms are using fewer and fewer secretaries and identify whether this trend is caused by:
     ▪ managers and professionals having become more computer literate
     ▪ e-mail allowing direct communication between parties.
2.   Describing a good secretary/administrator – how one who knows what is going on and can handle routine questions can dramatically increase accessibility and responsiveness.
3.   Developing skills, knowledge and characteristics of Secretaries and Administrators.
4.   Reviewing the desire and ability to take charge of secretarial, clerical and administrative tasks.
5.   Analysing the duties and responsibilities of administrators/secretaries.
6.   Highlighting the importance of communication, interpersonal and problem solving skills.

2.1.10   Business Programmes CREDIT FRAMEWORK Level Emphasis and Achievements Expected
(see Accreditation Handbook; Section 5.4.2; page 141)

2.1.2   BCE Computing Programmes
1.   Information Technology
2.   Computer Science
3.   Networking
4.   Web Design
5.   Graphic Design
6.   Programming
7.   Database

To participate and make informed decisions in today's world, all citizens require technological and information literacy skills that include the ability to gather, process, and manipulate data. These skills are now as essential as traditional numeracy and literacy.

UK and the rest of the world are becoming highly computer-literate societies with a large percentage of businesses and households connected to the information super highway. Computer technology and the information highway are also providing new opportunities for learning. Now a learner in remote or rural part can have the same access to resources as a learner in a large urban centre.

Computers are also quickly changing the way we work. Traditional jobs, such as those in the banking industry, are still dominating, however, new areas of economic activity, such as multimedia production, are growing rapidly. As well, how and where we work continues to evolve as technology impacts on the workplace.

As well as the rapid development of new technologies that gather, organise, and share information, familiar technologies like television, telephone, and computers are evolving and being expanded by digitised information, causing a convergence of technologies.

The challenge for learners and instructors is to develop an understanding of the fundamentals of information literacy and the tools required to prepare for, and participate in, an evolving information-based society. Learners need to have a firm grounding in computing for their careers, for lifelong learning and for recreation. The computing specification provide learners with the analytical, interpersonal, and technical skills they require to be active participants in an exciting and dynamic world.

2.1.2.1   Information Technology Programme Aim
Information Technology delivers integrated information services to enable customers to access the information they need, when and where they need it; meet/exceed customer requirements for technology service delivery; leverage existing, emerging, and innovative technologies to enhance, improve, and streamline business processes; ensure the privacy, integrity, reliability and appropriate use of information resources. Information Technology is responsible for providing strategic technology direction, the central IT support organisation and IT operational policies and standards, and coordinating major organisation-wide initiatives including: administration and management, the budget, technologies and applications, and the organisation's data.

Action plans detailing the requirements needed to achieve the vision and aims of the Information Technology Programme:

1. Exploring how modern businesses all over the world rely on computers to function and maintain high standards of efficiency and customer service.

2. Analysing how without IT professionals, companies would not have personnel to help maintain the technological elements inherent to their daily business needs.

3. **Computer speed** – Demonstrating how one of the main reasons so many businesses have turned to the IT world for their professional needs is the sheer speed at which computers and related technologies can process information. Email is a perfect example, as it eliminates the need to wait several days for a packet of documents to reach a client or business associate. Worldwide communications used to occur primarily through postal delivery. While still the optimal method for sending packages, printable materials such as legal documents or contracts may now move much more swiftly via the Internet. Businesses can receive news and updates which may provide vital insight into current market trends or changes a client needs almost instantaneously. Businesses are therefore able to provide immediate assistance to clients and thus improve their customer service.

4. **Efficiency** – Describing how increased speed often leads to increased efficiency. While eliminating the need to wait for packages or sensitive materials to arrive, businesses are able to receive and respond to changes instantly. This improved response time almost guarantees a higher chance at eliminating potential issues by allowing businesses to react quickly. Information technology also allows data to be stored in formats, which make information easier to store or send. The space a business saves by not having to maintain a room filled with filing cabinets and boxes of paper documents allows a organisation to function in less space and thereby reduce the cost of office rental or construction.

5. **MultiTasking** - Analysing the ability of computers to perform multiple tasks simultaneously. Provided the hardware is able to support it, how the operator may have several different programs functioning at the same time. Furthermore, how computers are generally capable of performing complex calculations, such as mathematical equations or travel distances, very quickly and accurately.

6. **Low Cost** – Identifying how computers themselves are much less expensive than they were years ago. As technology becomes more common, the cost becomes more affordable. Outlining how postal expenses and delivery costs may also decline as emails replace mail correspondence.

7. **Entrepreneurs** – Supporting how the Internet has become one of the foremost means of communication; online advertisements are present on almost every website and make it easy for consumers to find products and services offered by small business owners.

2.1.2.2 Computer Science Programme Aim

Computer Science is a relatively new discipline, originating from mathematics and physics departments. Computer Science prepare trained learners in specialised areas for jobs in industry, business, or government and to provide support in engineering, mathematics, and other fields requiring computing skills. Computer Science help learners to demonstrate proficiency in: problem-solving techniques using the computer; high-level programming languages and operating systems; the analysis of complex problems and the synthesis of solutions to those problems; comprehension of modern software engineering principles; breadth and depth of knowledge in the discipline of Computer Science.

Action plans detailing the requirements needed to achieve the vision and aims of the Computer Science Programme:

1. Outlining the two basic breakdowns which divide the discipline into theoretical computer science and engineering. Specialisation in theoretical computer science includes fields such as artificial intelligence, natural language processing, combinatorics, number theory, graphy theory, quantum computing and other arcs focused on the theoretical aspects of the discipline. The engineering track in most computer science programs concentrates on subjects such as operating systems, programming languages, network engineering, information security and software engineering.

2. Focusing on how the computer and computer programs work.

3. Focusing primarily on programming with an emphasis on the foundations of computers rather than software and hardware applications.

4. Highlighting computer science jobs such as software engineering, research and development, interface designer and web development.

5. Exploring reasons why future job prospects for both degree fields are accelerating at a faster than average pace due to the constant demand for new and more advanced technology and how the quick change in the field of computing, makes continuing in education important.

2.1.2.3 **Networking Programme Aim**

Networking programme enable learns to apply the typical job responsibilities and tasks of computer networking professionals, describe and use the technologies and applications for such professionals in the course of their everyday work; understand and follow all industry-recognised standards and protocols that govern the creation and management of networking systems that are both functional and free from threats; compare and contrast wired and wireless networking devices and standards and the pros and cons associated with the installation of wired and wireless systems.

Action plans detailing the requirements needed to achieve the vision and aims of the Networking Programme:

1. Describing why and how computer networks successful work
2. Identifying why information and communication are two of the most important strategic issues for the success of every enterprise. While today nearly every organisation uses a substantial number of computers and communication tools (telephones, fax, personal handheld devices), they are often still isolated. While managers today are able to use the newest applications, many departments still do not communicate and much needed information cannot be readily accessed.
3. Exploring why businesses aren't the only ones that can benefit from creating a network; home users can enjoy sharing music, movies and printers from any computer.
4. Analysing how computers connected to a network can share files and documents with each other; including how personal computers connected to a business network can choose which files and folders are available to share on the network.
5. Identifying how computers can print pages to another computer with a printer on the network. Additionally, how printers can be connected using a print server, which allows direct printing from all computers.
6. Distinguishing how sharing media between computers is easy when connected to a network. Like file sharing, how computers can stream music, videos and movies from one computer to the next.
7. Exploring how a media centre server can store entire documents and programs library on a centralised hub to give quick access to media from every computer on your network.
8. Describing how contributor computer networking permits multiple computers to communicate and share resources either through wired or wireless access. Articulating on how networking uptime and reliability has become extremely good, but when problems occur it can affect important operations on a global basis, including financial transactions.
9. Analysing the two types of computer networks in use; peer-to-peer networking and client/server network.
10. Analysing how networks improve access to research and education, and allow groups of employees to collaborate.
11. Exploring how the current utility of the web could not exist without computer networks and how these networks also offer multiple opportunities for hacking and malicious attacks, both personal and governmental.
12. Comparing the early slow network speed in 1976, around 300 Bps and available network speeds now reach 3 Gbs; including Terabit speeds, 1 million times faster than in 1976, are in sight.
13. Contrasting the different network operating systems.

2.1.2.4 **Web Design Programme Aim**

Web Design means planning, creation and updating of websites. From a technical standpoint, the act of web design can be quite difficult. Unlike more traditional print media, web software has a number of variable factors. Another major limiting factor is the plethora of formats a web site might be viewed in. While graphic designers know exactly how large the piece of paper they are printing on will be, a Web Designer must account for different monitor sizes, different display settings, and even browsers for non-sighted users. Combined, these concerns often leave a Web Designer professional struggling to incorporate enough dynamism to make a web page attractive on a range of browser sizes, while creating a layout static enough to allow for the use of images and other necessarily fixed-size components.

Action plans detailing the requirements needed to achieve the vision and aims of the Web Design Programme:

1. Exploring client-side (front-end) and server-side (back-end) .
2. Outlining the importance of having a website is a must for every business. In today's fast paced life, everyone wants everything on their fingertips. Today thousands of companies sell different products online at different rates. Web design plays a vital role in such situations. Web designing is an art that appeals to the users with texts and graphics. A website represents a business among its customers. Using the website for promotions and sales is a necessity in today's world.

3. Analysing how effective web designing can transform any website into an attractive one. The better a website looks, more the clicks it gets and better are the chances of getting positive response from its customers. The website should be noticed on the web and that is possible only with the help of a compelling website. Implementation of the right solutions and effective designing techniques will help the website in gaining a top search engine position and thus "boost" its sales.
4. Analysing the importance of web designing services, as many website development companies are opening up each day to help other business firms to demonstrate all about the organisation. Today a web designing firm provides every detail right from brochure to products and from different clients to the latest news.
5. Recalling advantages of internet as a major communication medium to millions of people.

2.1.2.5 Graphic Design Programme Aim

Graphic design is art with a purpose. It involves a creative and systematic plan to solve a problem or achieve certain objectives, with the use of images, symbols or even words. It is a visual communication with the aesthetic expression of concepts and ideas using various graphic elements and tools. Good design makes a difference in our world. Whether it is communicating a social idea, helping a business attract clients, motivating people to join an organisation, enabling citizens to vote for the candidate of their choice, or simply helping travellers find their way through a busy airport; good design means connection. Graphic design combines the creativity and formal characteristics of fine art with the audience-centered approach of marketing to create effective visual communication. Unlike fine art, it is always in the service of the client's needs.
Proper design has the power to:
▪ Improve image and strengthen organisation brand.
▪ Make business stand out from competitors.
▪ Sell messages to customers more convincingly.
▪ Build customer loyalty.
▪ Attract more customers.

Action plans detailing the requirements needed to achieve the vision and aims of the Graphic Design Programme:
1. **Why society needs Graphic Design** - Every organisation in the world has some sort of graphic design involved within their organisation; whether it is the brochure picked up from the store, the menu looked at when ordering dinner, or the post card received in the mail; it is everywhere. Companies cannot live and function with out graphics. It has been proven in the past that the more organisations advertise, the more they get in return. And it has also been proved that if organisations stop advertising no matter how big or how well known the organisation is; that they will slowly see a decrease in sales.
2. **Why the logo is the identity** - like human beings, company logo is the organisational identity. This is crucial. Branding an organisation cannot be done with out Graphic Design. Sure a organisation can have an inside marketing team, but this can only go so far. Brand identity is what consumer see organisations as. Organisations want customers to visually know who they are and remember them with a positive and effective memorable feeling. *Graphic Designers in today's world solely specialise in just that!*
3. **Why understanding the layout of design is so important.** If the layout isn't correctly understood, the reader could totally miss the message and advertising expense just went down the drain. One typical standard layout that has a huge proven impact is the "Z" layout. The "Z" layout, is a layout in which the structure is in the for of the letter Z. Usually in this order: **Headline**, **Photo**, **Caption**, **Copy**, **Signature**. By nature the human eye tends to follow this pattern when they look at an advertisement.
4. **Research** - By researching the product, that means one goes out of their way to find out what the competitors are doing.
5. **User Friendly** - This idea is really similar to layouts. This also tends to be more towards web design more than anything. Layout even if it is not a web site should be user friendly. At no point in time should a customer feel like they are lost in any form.

2.1.2.6 Programming Programme Aim

A computer program is a sequence of instructions for managing a particular requirement. Whatever you want to do with a computer, you are manipulating a set of electrical symbols the computer understands in a particular order. Programming is discovering a set of rules with real world effects. Programming is designing idealised representations of these rules and the real world objects affected by these rules; it is understanding the interactions of these rules and their objects. Programming is optimising the interactions of these rules for the constraints of safety, budget, correctness, and other resources. Programming is a complicated activity that requires discipline, patience, practice and study—like any creative act. It is part logic and proof (like Maths) and part design (like producing a board game that is easy to understand but fun to play). It can be difficult and enjoyable at the same time. Programming is not easy (what worthwhile human endeavour is?), but it is essential

to multiplying the power of human creativity and effort to meet the needs and realize the goals of our modern world.

Action plans detailing the requirements needed to achieve the vision and aims of the Programming Programme:

1. **Systems Knowledge** - Computer programmers have a full understanding of the *hows* and *whys* of computer systems, including system limitations, and can set realistic expectations and work around those limitations to fully maximize the use of the equipment and its accessories.
2. **Creativity Platform** - Programming is a platform to showcase creativity, especially in problem-solving and entertainment. Programming develops new video games, graphics and animations to showcase new business ideas or to resolve a particular problem.
3. **Interactive Education** - Programming, especially in web development, has allowed new interactive web applications that have access to system resources and provide the same level of control as desktop applications. Used on online learning platforms, these applications have allowed distance-learning programs to take off. Today, almost all major learning institutions have some form of online learning implementation, thanks to computer programming.
4. **Defining the Future** - Computer programming principles implemented today will likely influence how technologies such as voice-recognition, artificial intelligence and other sophisticated technologies will change in the future and how they will be applied to our day-to-day lives. For example, the trend toward automating internet searches and purchases to be more localised is ongoing. While the hardware platforms developed will play a major role, computer technology will likely be at the center of it all and programming future systems will be an important aspect.
5. **Machine Language** - Since computers work with numbers, programming allows the representation of machine-language in human-readable format. This reduces chances of introducing errors and wasted time in debugging and correcting mistakes.

2.1.2.7 Database Programme Aim

A database is a collection of information organised to provide efficient retrieval. The collected information could be in any number of formats (electronic, printed, graphic, audio, statistical, combinations). There are physical (paper/print) and electronic databases. A database management system (or DBMS) is essentially nothing more than a computerised data-keeping system. Users of the system are given facilities to perform several kinds of operations on such a system for either manipulation of the data in the database or the management of the database structure itself. Database Management Systems (DBMSs) are categorised according to their data structures or types.

Business in much of world depends on database technology.

Action plans detailing the requirements needed to achieve the vision and aims of the Database Programme:

1. *Finance:* the UK clearing banks have calculated that if their database systems were removed it would take every person in UK working 24 hours per day, 7 days per week to process all the financial transactions manually. The London stock exchange relies on computer systems for recording buying and selling of stock which happens very quickly and in large quantities. The amount of money involved in these transactions is enormous.
2. *Transport:* All the airlines use online seat reservation systems and have systems for scheduling aircraft, for building and maintaining timetables, for handling the in-flight catering and for mechanical servicing of the planes. Similar systems exist for rail, sea and road transport. They all use database technology extensively.
3. *Utilities:* the major utilities (water, electricity, gas) all have generation/distribution systems based on database technology. *Resources:* The mineral exploration/extraction companies, and governments who regulate them (especially for oil exploration/extraction) have extensive databases which have complex data structures (usually including GIS (Geographical Information System)) components.
4. *Production engineering:* from scheduling workflow through the production lines of machines to stock control and order processing, database technology underpins all activity in this area.
5. *Environment:* protection and control of the environment by government agencies depend heavily on database systems with GIS facilities, together with databases of toxic substances and clean-up recommendations.
6. *Tourism:* hotel systems and local tourist attractions, information and booking facilities rely on database systems, and the major package tour operators have extensive databases for holiday planning and booking, together with financial systems for payment and invoicing.

7. *Leisure:* the entertainment industry uses database systems extensively for theatre, concert and cinema ticket bookings.
8. *Culture:* museums, art galleries, history exhibitions - all utilise database technology (and especially multimedia database technology) for cataloguing their collections and recording access to them.
9. *Education:* courses, materials, and assessment all rely heavily on database technology in all sectors of education. Increasingly the linking of database technology with hypermedia delivery systems allows courseware to be maintained up-to-date and delivered to the consumer.
10. *Healthcare:* healthcare has long relied on database technology to schedule hospital beds or appointments at clinics or doctor's surgery.
11. *Government administration* would be paralysed without database technology; the collection of taxes and the payment of social security benefits depend totally on database technology.

2.1.2.8 Computing Programmes CREDIT FRAMEWORK Level Emphasis and Achievements Expected
(see Accreditation Handbook; Section 5.4.1; page 139)

2.1.3 BCE Hospitality Programmes
1. Hotel Management
2. Travel & Tourism

2.1.3.1 Hotel Management Programme Aim
The hospitality industry consists of a range of service providers that include bars, restaurants and lodging establishments. A wide spectrum exists within these categories. The restaurant category alone runs the gamut from fast food to fine dining, and the lodging category includes economy motels, casino hotels and resorts. Performance objectives for hospitality providers are interrelated and, to some extent, dependent upon one another. (i) Customer Service - excellent service is one of the hospitality industry's primary objectives; (ii) Product Quality - customers love good service, but the hospitality industry must also provide quality products to satisfy customers; (iii) Volume - hospitality industry deals with customer volume; (iv) Ratings - publicly available ratings can reflect the success of a hospitality-based organisation in meeting its performance objectives.

Action plans detailing the requirements needed to achieve the vision and aims of the Hotel Management Programme:
1. Exploring how the hospitality industry faces new and complex changes in the 21st century. Management in hospitality have responsibilities including; policy-making within global, international and national contexts, apply innovative strategic planning approaches in response to corporate policies. Good strategy creation and execution are the key ingredients in a hospitality organisation's recipe for success. The main focus is on how managers can guide their hotels in the formulation, implementation, and evaluation of strategies.
2. Analysing the skills necessary to operate a hotel front office, including communications and human relations, front office operations, reservation systems and procedures, determining room availability and rates, registration procedures, cashier and billing procedures, and night audit procedures
3. Exploring the many different hospitality industries all over the world. Different hospitality industries work in different sectors. But there are few industries which are called successful businesses. Business becomes successful by a proper management system. So the management system is very important in the sector of development.
4. Analysing the management systems that manage all things about hotel business. Exploring the hotel management techniques including hotel administration, accounts, marketing, maintenance, housekeeping, food and beverage management and catering.
5. Opportunities in Hotel Management programme. After completing hotel management programme, learners can apply to various small and luxurious hotels all over the world. And that's the real opportunity for a learner; with worldwide job opportunities, they can work anywhere.
6. Exploring how management system improves the service and hospitality management, how polite the behaviour should be and also the importance of a guest in a hospitality industry.

2.1.3.2 Travel & Tourism Programme Aim
Different types of travel industry objectives exist and particular objectives depend on the goals and focus of the organisation. Creative and innovative objectives give a travel organisation exciting, new options to increase the value of products and services to customers. A creative objective could focus on gaining repeat business through customer travel rewards or vacation contests. Improvement objectives focus on increased revenue, decreased costs and increased customer satisfaction. An example of an improvement objective is training employees to effectively up-sell travel packages, which can increase revenue. Operational objectives function to help improve

the routine processes of the travel organisation such as customer service, accounting practices and employee relationships. A worthy operational objective could be based on helping employees work more efficiently and accurately within the travel organisation reservation platform.

Action plans detailing the requirements needed to achieve the vision and aims of the Travel & Tourism Programme:

1. Exploring how travel and tourism is related not only to holidaying but has also emerged as one of the major industries of the world and generator of jobs.
2. Describing how Travel and Tourism is the nation's largest retail sales industry. The economic, social and cultural benefits that tourism brings to the local community are commendable.
3. Analysing tourist attractions - there are many places that attract tourists and hence there are some requirements to promote tourism.
4. Exploring factors favourable to tourism, including; peaceful atmosphere in the country and enough facilities for accommodation, transportation and effective machinery is necessary to give wide publicity relating to tourist attractions
5. Analysing the advantages of tourism.
6. Importance of tourism in stimulating growth – In June 2012, the World Travel & Tourism Council (WTTC) wrote to all 27 Finance Ministers in the European Union urging them to recognise the important role of the industry in stimulating economic growth and jobs, while avoiding unproductive knee-jerk tax hikes at a time of austerity. The letter, written by Dr Michael Frenzel, Chairman of the Executive Board, TUI AG and Chairman, WTTC and David Scowsill, President & CEO, WTTC, reminded Finance Ministers that Travel & Tourism is a key generator of employment across the European Union directly generating 10 million jobs across Europe, substantially more than the automotive manufacturing (3.2 million), mining (3.6 million) and financial services sectors (8.5 million). 'Given the labour intensity of Travel & Tourism, and as the above data shows, Travel & Tourism is one of the few economic sectors which can generate economic growth with jobs,' the letter says.
7. Recognition of Travel & Tourism as a driver of economic growth by G20 - In June 2012, the G20 world leaders have for the first time, recognised the importance of Travel & Tourism as a driver of jobs, growth and economic recovery. The Leaders' Declaration from the annual meeting of the G20 world leaders, held in Los Cabos, Mexico, on 18-19 June, recognised "the role of travel and tourism as a vehicle for job creation, economic growth and development, and, while recognizing the sovereign right of States to control the entry of foreign nationals" and commits to "work towards developing travel facilitation initiatives in support of job creation, quality work, poverty reduction and global growth."

2.1.3.3 Hospitality Programmes CREDIT FRAMEWORK Level Emphasis and Achievements Expected
(see Accreditation Handbook; Section 5.4.3; page 144)

For detailed description of Business, Computing and Hospitality Programme Units, Career Opportunities, Earning Potential and Employment Prospects; see **Programme Analysis & Occupational Outlook** on BCE website.
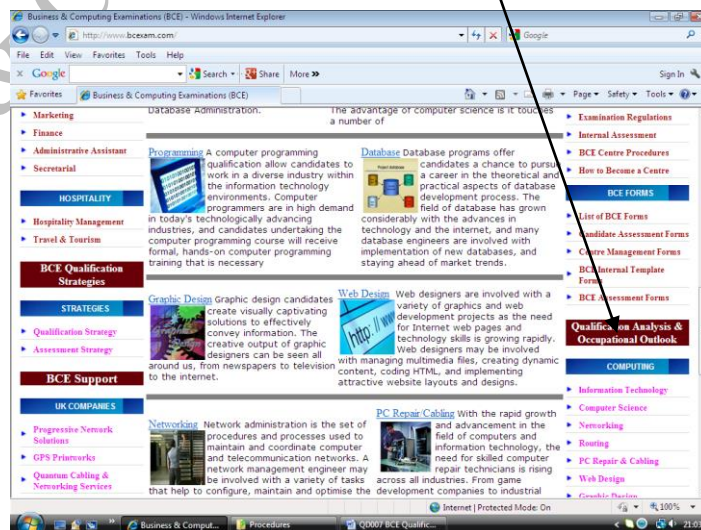
2.2   **Progression Routes**

The learning programme levels for BCE progression routes are as follows:

- CREDIT FRAMEWORK Level 3
- CREDIT FRAMEWORK Level 4
- CREDIT FRAMEWORK Level 5
- CREDIT FRAMEWORK Level 6

These levels provide an organisational framework for the knowledge, skills, and attitudes contained in the learning outcomes and assessment criteria.

Indeed, Level 3 or 4 is the most important element of learners career.

To obtain a programme, each learner has to sit for a final examination, set and marked at BCE (UK) London and has to pass *all* units, including the coursework.

BCE programmes outline:

- learner and industry requirements
- identifies success performance
- specifies what learners should achieve
- identifies relevant cognitive skills

using the following strategies:

- Programme and Standards
- Values in Programme Development Process
- BCE Quality Control