

Group: Pre Engineering :

1- Petroleum & Gas Engineering :

Petroleum and gas engineering has become a huge area of interest for the world because of its rising demands. This 4-year program will teach you the science and computer-based skills required for drilling, exploration, exploitation, and development of gas and oil fields.

Scope :

If you want to know what to do after your FSc, then pick Petroleum & Gas Engineering without! There are thousands of opportunities for young professionals available at a variety of organizations/departments in the petroleum and gas industry. Every year, a large number of enterprises and organizations in Pakistan that are involved in the petroleum and gas industry hire for various roles for all interested Petroleum and Gas Engineers in order to improve Pakistan's economy.

2- Agriculture Engineering :

Agriculture Engineering or Agricultural and Biosystems Engineering is, somehow, a mixture of various other fields like civil, mechanical, electrical, food science, chemical, software, environmental, etc. It's one of the best fields after FSc with amazing future opportunities.

Scope :

With the passage of time, Pakistan's requirement for agricultural engineers is growing. Opportunities for agriculture-related areas, particularly those associated with breakthrough technology, will always be excellent in an agricultural-based economy. Pakistan continues to lag behind in terms of agricultural output efficiency. Nonetheless, it is one of the top 10 producers of wheat, milk, and other agricultural products.

3- Materials Engineering :

After FSc, this field of engineering can really help you stand out in the crowd because, in Pakistan, not many people know about it. As the name implies, Materials Engineering is all about the studies of different materials, usually solids. If we look into the details, Materials Engineering deals with the discovery of new materials and improving the existing ones either to make them lighter, heavier, stronger, denser, etc.

Scope :

There are job openings in a variety of fields. With the development of nanotechnology, more and more opportunities are being generated. There are various professional opportunities in Pakistan in a range of areas, and a graduate of material science and engineering may easily find work in a variety of well-paying professions.

In Pakistan, there's only one well-known university that offers the Materials Engineering degree and that is NED University of Engineering and Technology.

4- Automotive Engineering :

Automotive engineering is the branch of vehicle engineering that deals with the development, design, and manufacture of various automobiles. The application of mathematics in the design and construction of vehicles falls under this field of engineering. Safety engineering, vehicle electronics, quality management, and fuel economy, and emissions are some of the technical disciplines that may be used in this industry. Automotive engineers are also called automobile engineers.

Scope:

1. A development engineer or a change control engineer are two options.
2. Make a career in the field of manufacturing engineering.
3. Body engineers and aerodynamics engineers have a lot of opportunities in the world of automobiles and automotive engineering.
4. Sports vehicle manufacturing will recruit you.
5. Find a job at a vehicle factory for cars or a motorbike factory for motorcycles.
6. You may work at a factory that makes large trucks.

5- Architectural Engineering :

Architectural engineering is a branch of engineering that deals with the technical aspects of planning, design, and building as a whole. It's a mix of math, physics, chemistry, and other sciences essentials, therefore you'll need to be quite proficient in these topics.

Because of the excellent future potential and value, this is one of the best fields after FSc in Pakistan

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Scope :

Architecture is becoming increasingly fashionable in today's modern environment. After completing architecture school, every student wants to understand what the most common occupation in the field is. The key employment sectors are as follows:

1. Private Construction Organizations
2. Railway Department

3. Architecture Development Firms
4. Public Works Department

6- Communication System :

Communication systems engineers create the receivers, transmitters, and infrastructure that allow communication via commercial radio and television, wired and wireless phones, the Internet, and other types of data transmission. Completing communications systems area coursework can help students get a better grasp of areas including electromagnetics, digital and analog modulation, signal processing, and a lot more

7- Computer Engineering :

Computer Engineering can be a life-changer for you as an FSc graduate. Circuits, conductors, processors, and any other component utilized in computer devices or systems are developed, prototyped, and tested by Computer Engineering students.

Scope :

Because Pakistan's computer manufacturing sector is still in its early stages, the opportunities for computer engineers in Pakistan are limited. Computer engineers, on the other hand, find plenty of opportunities to design automated systems in software, telecom, and other industrial businesses.

8- Computer System :

Computer systems engineering is the science and technology of designing, building, implementing, and maintaining software and hardware components of contemporary computing systems, computer-controlled equipment, and intelligent device networks.

Scope :

There are other branches of computer science and information technology, but programming, in particular, offers numerous benefits and drawbacks. Let's have a look at some examples:

1. You can work from home because everything is done using a computer and high-speed internet.
2. You may complete all of your tasks from the comfort of your own home, without the need for a large office.
3. Starting a business in this industry is quite simple.

9- Construction Engineering & Management :

Construction engineering management is the application of technical and scientific knowledge to infrastructure development initiatives. Engineering (which focuses on design) and construction management (which oversees the actual construction) are combined in construction engineering management.

Scope :

Civil engineering is an evergreen career. Construction management has a lot of promise in Pakistan since the construction industry gives so many opportunities for your achievement.

1. You can pursue a Ph.D., complete your thesis, and research if you did not work between your bachelor's and master's degrees.
2. You can get a job based on your master's degree through your college placement.
3. As previously said, you are free to travel to any Middle Eastern country because there are so many possibilities.

10- Electrical Engineering :

Because an electronics engineering degree is likely to provide you with a strong understanding of the circuits used in computers and other modern technology, electronics engineering is typically taught alongside computer science.

Scope :

Electrical engineers have a wide range of applications and are in great demand in Pakistan. Electrical engineers have more chances of making careers in Pakistan than engineers in any other discipline. Pakistan is still experiencing energy shortages, necessitating the development of renewable energy sources, which would increase the demand for electrical engineers. In Pakistan, an electrical engineer with a bachelor's degree and at least 5-7 years of experience earns an average salary of PKR 2,00,000/-. Electrical engineers' starting salaries range from PKR 60,000 to 90,000 per month.

11- Electronics & Telecom :

The electronics and Telecommunication Engineering curriculum provides students with a thorough understanding of fundamental science and engineering concepts, allowing them to gain a thorough understanding of computer architecture and microprocessors,

electromagnetic field theory, VLSI and embedded systems, analog and digital communication, microwave and broadband communications, and digital signal processing.

Scope :

Electronic engineers have a promising future. Many businesses are presently unable to fill vacancies due to a lack of workers in the nation. For experienced electronic engineers, this translates to higher pay and a faster road to progression. Electronic engineers have a lot of possibilities for growth, especially if they keep up with the rapid pace of technological breakthroughs and innovative ideas.

12- Energy & Environment :

Energy engineers must be knowledgeable in a wide range of subjects. Working in the construction industry as well as in the renewable and traditional energy firms are all possibilities. Energy engineering necessitates a fundamental understanding of mechanics, materials, mathematics, stoichiometry, industrial processes, electrical machines, and energy systems.

Scope :

The scope of environmental science in Pakistan is constantly growing. After receiving a bachelor's degree in environmental science, environmentalists strive to detect problems with our environment all around the world. They also seek to find solutions to these problems. They seek to restore and sustain natural resources and biodiversity in government and private organisations. Students who get a bachelor's degree in environmental science might flourish in a variety of fields, depending on their interests.

13- Environmental Engineering :

Environmental engineering is a branch of engineering that focuses on protecting humans from the bad effects of the environment, such as pollution, while also improving the environment's quality. Engineers who work in the field of environmental engineering help to improve recycling, public health, waste disposal, and water and air pollution control. Environmental Engineering is exactly what to do after FSc if you're looking for success.

Scope :

Environmental engineering is expected to expand by 8% during the next ten years. Due to a lack of interest on the part of the government and other stakeholders, job possibilities in

Pakistan are restricted. However, if environmental concerns such as current pollution in Punjab and other places, less rain, and glaciers melting become more prevalent, the government and society will be forced to discover new measures to safeguard the environment.

14- Geological Engineering :

The branch of engineering, Geological engineering, deals with geological research and engineering principles to a wide range of sectors, such as mining, civil engineering, forestry, and environmental engineering.

Scope :

In Pakistan, a geologist might pursue a variety of careers. In numerous fields such as Water & Management, Hydrology, and Seismology, professional geologists have acquired a better scope of BE Geology in Pakistan. Your posting position is determined by your own abilities, experience, and degree of qualification if you have a bachelor's or master's degree. God has blessed Pakistan with land that possesses all of the qualities. With the BE geology scope in Pakistan, you may expect a successful and promising career.

15- Industrial and Manufacturing Engineering :

Industrial and manufacturing engineers are in high demand and play a critical role in workflow planning to guarantee the most effective use of resources. With this degree in hand, you will not only study how to handle production difficulties aluminum will also take business classes to prepare for a career as an entrepreneur or in management. If you're looking for the best fields in Pakistan after FSc, step into Industrial and Manufacturing Engineering.

Scope :

Industrial engineers work in a variety of industries, including chemical, manufacturing, technology, hardware, and healthcare. Because these are all large corporations and industries, industrial engineers are paid well.

16- Industrial Engineering :

The planning, analysis, and administration of production and service operations and systems are all part of the area of industrial engineering. An industrial engineer formerly

worked in a factory, where he or she was in charge of both human and machine productivity. Industrial engineers nowadays are more concerned than ever before with productivity and all of the technical challenges that come with factory management and control.

Scope :

Industrial engineers have a wide range of responsibilities since they are employed in almost every business today. Industrial engineers are employed in a variety of industries, including chemical, manufacturing, technology, hardware, and healthcare. Due to the fact that these are all large corporations and industries, industrial engineers are paid well.

17- Metallurgical Engineering :

One of the least known fields after FSc, Metallurgical engineering, studies metals, their mining and extraction, and how metals react to environmental changes or stress. Metallurgical engineers research the properties of metals including aluminum, iron, nickel, copper, and steel in order to develop a wide range of useful products and materials with specialized features.

Scope :

Metallurgical engineering has a lot of promise in Pakistan. It's a broad term that covers a wide range of industrial sectors as well as the use of metals and metal alloys. In order to ensure a successful future, students should be encouraged to explore opportunities in this cutting-edge and vital field of engineering. Graduates work in a variety of fields and businesses.

18- Mining Engineering :

Here's what to do after FSc; Mining engineering!!! It is a branch of engineering that deals with the science, technology, and application of obtaining and processing minerals from the natural world. From exploration and discovery through feasibility, development, production, processing, and marketing, it covers all aspects of mining operations. Following that, the site of the extraction must be repaired and rehabilitated.

Scope :

Mining engineering is an enormous field with a lot of scope in Pakistan. The desire for new mining sites is growing as the world's resources are depleted at an alarming rate.

Students should be encouraged to investigate options in this creative and fundamental subject of engineering in order to better prepare for their future careers.

19- Telecommunication Engineering :

Telecommunications engineering is a discipline of engineering concerned with data transmission across wired and wireless networks. Telecom engineers work on voice and data communication systems such as fiber, satellite, wired, and wireless connections, as well as data encoding, encryption, and compression. To put it simply, telecommunications engineering can be found in practically every aspect of our lives, from GPS navigation to the internet.

Scope :

Due to an influx of university graduates in recent years, the scope of Telecom Engineering in Pakistan has been constrained. However, in the future years, the sector is projected to mature and flourish and this field is expected to be listed in the best fields after FSc in Pakistan.

20- Textile Engineering :

Textile B.Sc studies in Pakistan are a type of industrial activity that entails the transition of fibers from fiber to yarn, yarn to clothing or fabric, and finally apparel or home textile. Different types of natural and non-natural fibers are used to make various sorts of clothing. Nowadays, we may choose from a wide range of materials in a variety of colors and patterns. Textile engineering has resulted in textiles that increase our living standards and aesthetics.

Scope :

As I stated in the preceding section, Pakistan requires B.Sc Textile Engineers with the capacity to produce new approaches as well as the ability to assess and solve issues in accordance with the necessities of the present period. As a result, anyone who is capable of doing these tasks will be in great demand in the national and global textile sectors. B.Sc textile engineering offers a wide range of career prospects in Pakistan. Those who enhance their skills and get appropriate experience would be in high demand, showing a high profile scope and opportunities for growth throughout Pakistan.

21- Civil Engineering :

Civil Engineering deals with designing, constructing, and maintaining physical and natural structures such as buildings, bridges, dams, and roads. This field focuses on creating sustainable infrastructure.

Scope:

Civil engineers are in high demand in Pakistan due to the growing need for infrastructure development. Opportunities exist in both public and private sectors, including construction firms, urban planning departments, and multinational companies.

22- Mechanical Engineering :

Mechanical Engineering involves the design, analysis, manufacturing, and maintenance of mechanical systems. It applies principles of physics and materials science to engineering challenges.

Scope:

Mechanical engineers have versatile career options in industries like automotive, aerospace, power plants, and manufacturing. Pakistan's industries, particularly in manufacturing and energy, have a strong demand for skilled mechanical engineers.

23- Chemical Engineering :

Chemical Engineering focuses on the processes involved in the production, transformation, and use of chemicals, materials, and energy. It combines principles of chemistry, physics, and engineering.

Scope:

Chemical engineers can work in industries such as petrochemicals, pharmaceuticals, food processing, and environmental protection. In Pakistan, opportunities exist in oil refineries, fertilizer plants, and industrial processing facilities.

24- Aeronautical Engineering :

Aeronautical Engineering deals with the design, development, and maintenance of aircraft and spacecraft. It includes disciplines like aerodynamics, propulsion systems, and avionics.

Scope:

Aeronautical engineers can find jobs in Pakistan's aerospace industry, defense organizations like SUPARCO, and international aviation companies. With the rise in drone technology, new opportunities are emerging in this field.

25- Mechatronics Engineering :

Mechatronics Engineering combines mechanical, electrical, and computer engineering to create smart machines and systems.

Scope:

Pakistan's industries, particularly in robotics, manufacturing automation, and medical devices, are adopting mechatronics technologies, creating strong demand for professionals in this field.

26- Biomedical Engineering :

Biomedical Engineering bridges medicine and engineering, focusing on developing medical devices, diagnostics, and healthcare technologies.

Scope:

Although still emerging in Pakistan, biomedical engineers are finding opportunities in hospitals, research facilities, and medical equipment companies.

27- Aerospace Engineering :

Aerospace Engineering specializes in the design and development of aircraft, spacecraft, and related technologies.

Scope:

Aerospace engineers in Pakistan can work in defense organizations, airlines, and research and development centers focused on aviation technology.

28- Robotics Engineering :

Robotics Engineering involves designing, building, and programming robotic systems for applications in manufacturing, healthcare, and other industries.

Scope:

Robotics is an emerging field in Pakistan, with growing opportunities in automation, defense, and research organizations.

29- Polymer Engineering :

Polymer Engineering focuses on developing and improving polymer materials used in products like plastics, rubbers, and composites.

Scope:

Opportunities exist in manufacturing industries such as packaging, automotive, and medical equipment production.

30- Avionics Engineering :

Avionics Engineering is a subfield of aerospace engineering focusing on the electronic systems of aircraft, including navigation, communication, and control systems.

Scope:

In Pakistan, avionics engineers can work with defense organizations and in civil aviation.

Group: Pre Medical :

1- Bachelor of Medicine and Bachelor of Surgery (MBBS) :

Want to know what to do after FSc if you love the field of medicine? The most common undergraduate medical curriculum throughout the world is the Bachelor of Medicine and Bachelor of Surgery (MBBS). The MBBS curriculum is needed for all clinical college students who need to emerge as practicing docs with inside the discipline of allopathic medicine. The curriculum includes several components of medicine and human anatomy in order to teach students how to detect and treat a variety of illnesses.

Scope:

The importance of MBBS has always been in the midst of a bright future. It is one of the best medical fields in Pakistan. Being a doctor not only allows you to earn more money, but it also gives you more respect and status in society than any other profession. For the purpose of obtaining employment, this category includes both the public and private sectors. As a government employee, you will be employed via a public hospital, but if you want to open a private medical clinic, you can do so as well.

2- Bachelor of Dental Surgery (BDS):

The Bachelors of Dental Surgery (BDS) curriculum trains oral surgeons to be proficient and advanced. It is the science and art of employing science and art to prevent, diagnose, and treat diseases, injuries, and anomalies of the teeth, jaws, and mouth. Health and illness, preventative dentistry, behavioral repercussions of oral disorders, clinical examination and diagnostic techniques, X-rays, and genetic engineering are some of the subjects covered in this course. This program provides students with a challenging and fun learning environment that encourages them to continue learning even after completing the degree.

Scope :

It's one of the most cherished fields in medical with a 100% job placement rate. BDS graduates can enroll in PG degree programs leading to the Domain MDS (Master of Dental Surgery). A master's degree in dentistry allows students to specialize in any of the dental specializations. A Doctor of Philosophy is available to those who want to pursue a research program. Graduates of the BDS program may pursue a career as a teacher. Those who want to teach can apply for employment at any of the top dental schools. They can be professors or even heads of departments (HODs), with the option of advancement to Dean of the Department.

3- Doctor of Pharmacy (Pharm.D) :

Along with many other fields, there's this one field in biology after 12th class that is considered highly respectable in Pakistan. A Doctor of Pharmacy (PharmD) is a professional doctorate degree that normally takes four years to complete. A Ph.D. degree prepares you for a future in academics and research, culminating in a dissertation, whereas a PharmD program prepares you for a career in pharmacy.

Scope :

You will be eligible to operate a medical store in Pakistan or abroad after obtaining this degree. You can also work in a pharmaceutical plant or start your own pharmaceutical company. Pakistan's government also recruits dedicated and qualified pharmacists for public hospitals and pays them on the 17th scale. Furthermore, if you don't want to work for the government and don't have enough money, you may get an MBA in marketing after receiving this degree; this is also a good option for D pharmacists.

4- BS in Diet and Nutrition :

Food and nutrients are required for humans and all other living species to exist. Without food in its metabolic system, no mammal, insect, reptile, or other life can survive. BS Food and Nutrition is an excellent field in which to work in the future. These parts of life are also utilized in the creation of cures for sickness and disease.

Scope:

In Pakistan's public sector, the current scope of a Doctor of Nutrition and Dietetics is ordinary, but a large scope is expected in the future. However, in the private sector, the scope of HND is relatively broad, and every nutritionist may easily find work there, as opposed to the general public. The ratio of private-sector nutritionists to public-sector nutritionists is higher.

5- BS Medical Laboratory Technology :

The Bachelor of Science in Medical Lab Technology (BS-MLT) is a four-year degree program that teaches students about lab tests used in illness detection, diagnosis, prevention, and treatment. The program includes both general education and professional topics (such as English, mathematics, and statistics) (such as clinical Chemistry, Microbiology, Parasitology, Hematology, Blood Banking, Serology, etc).

Scope:

It is considered one of the best medical fields for females in Pakistan after FSc. Any field's scope is determined by market demand and professional development prospects. The need for a Doctor of Medical Laboratory Science (DMLS) is quite strong in hospitals, labs, and other medical search institutes since MLT is a degree-level study.

6- BS Vision Sciences :

Simply described, vision science is the study of your eyesight. It is, as previously said, a relatively new phrase. It's a term that refers to any research into how people and animals perceive visual information. There were various sub-types of this field, including ophthalmology, neurology, computer vision, perceptual psychology, and others.

Scope:

You can apply for a specialty in the subject of visual sciences once you finish your MBBS in Pakistan. After earning a professional degree, you can work as an eye specialist or as a vision scientist for the government. Graduates of vision sciences, on the other hand, are not permitted to practice as general physicians, but they can use their technical skills in vision technology to assist Ophthalmologists in diagnosing eye problems such as squints, investigating eyesight, and recommending remedies and medicine to patients.

7- BS Intensive Care :

Intensive care technologists are in great demand in every hospital and healthcare facility. This course will cover all you need to know about ICU patients' intensive care. You'll learn how to keep track of the equipment, capture data, and communicate that information to the doctors. You'll also learn how to provide first-aid to patients in the event that medical help is unavailable.

Scope:

Because all hospitals require such professionals to administer their emergency departments, the training in treating medical and surgical crises broadens the scope in hospitals. They can be used to help with natural disasters such as earthquakes, floods, and the rehabilitation and administration of displaced people. They may become valuable members of disaster management and create active teams that are always ready to respond to any natural disaster.

8- Doctor of Physiotherapy (DPT) :

Physical therapy is an important part of today's medical system. It is both a science and an art of healing. It focuses on evidence-based treatment options in mobility, manual therapy, physical agents, and therapeutic modalities to alleviate pain and other issues. As a result, physical therapy encompasses all aspects of healing sciences, including preventative, promotional, diagnostic, rehabilitative, and curative care.

Scope:

After earning a five-year doctor of physical therapy degree, one can work as a physical therapist in rehabilitation facilities, nursing homes, sports fields as a sports therapist, or in non-profit organizations. They can also work independently in clinical settings or pursue academic careers as lecturers or active researchers in the field of rehabilitation research. Master's degree programs in the discipline are available in a variety of fields, including Neuromuscular, Orthopedic, Musculoskeletal, Cardiopulmonary, and others.

9- BS Bioinformatics :

The BS in informatics is built on a limited number of core courses that cover the basics of informatics (human-computer interface, design), software (programming, requirements analysis), and human behavior (the social analysis of computerization). Following that, two specialties, human-computer interaction, organizations, and information technology allow students to specialize their studies with over three dozen courses to select from.

Scope :

In Pakistan, there is a vast and demanding Bioinformatics market, and graduates with this degree will have a lot of opportunities. A degree holder might find work in biotechnology labs, pharmaceutical companies, research departments, forensic labs, and international centers for chemical and biological sciences.

10- Biomedical Engineering :

Biomedical Engineering, often known as Bioengineering, BioMed, or BME, is a multidisciplinary STEM area that brings biology and engineering together to apply engineering ideas and materials to medicine and healthcare. Biomedical engineering combines aspects of mechanical, electrical, chemical, materials science, chemistry, mathematics, and engineering with human biology to improve human health.

Scope:

As you may know, biomedical engineering is a relatively new field in biology after 12th class, thus there is now no competitive scope, but a huge and demandable scope is expected in the near future. It is perilous to enter this field. In comparison to other engineering and medicine disciplines, Biomedical Engineering has no competitors, allowing you to build a successful career in this field without experiencing stiff market competition.

11- BS Biotechnology :

The Bachelor of Science in Biotechnology is aimed to provide students with a current and practical understanding of this interdisciplinary and rapidly growing discipline.

Biotechnology is the application of scientific and technical principles to the biological processing of resources to produce commodities and services. Biotechnological applications are significant in the health care business, agriculture, and the environment, and they assist to make people's lives more serene and pleasant.\

Scope:

This is supposed to be the era of biotechnology, in which biosciences and technology have merged, leading to the creation of new types of food and animals. Without a doubt, it is now feasible to create a baby without using a natural process, and the procedure used to create a newborn using a natural process is known as biotechnology.

12- BS Microbiology :

The BS in Microbiology is an ideal research preparation program for students interested in research careers in academia, medicine, or industry, as well as related disciplines where first-hand research experience is advantageous, or as a prerequisite for more advanced degrees. Graduates of the program have the skills needed to make a positive and ethical contribution to scientific research.

Scope :

With the advancement of science and technology, the scope of microbiology in Pakistan is increasing day by day. It has a stranglehold over practically every aspect of existence. This is one of the top disciplines in which to study science. It has a very broad reach that expands with the passage of time, not only in Pakistan but throughout the world. A microbiologist can easily get the employee in any one of the below-listed job areas

1. Poultry Industries
2. Chemical Industries
3. Veterinary Labs
4. Dairy Farms
5. Consulting firms

13- BS Genetics :

Genetics is one of the most popular and rapidly growing fields after FSc pre-medical in Pakistan, and it entails an in-depth examination of living organisms' heredity processes

and genes. If you want to learn about the science underlying how living organisms' biological functions work, you should consider pursuing a B.Sc in Genetics.

Scope :

The scope of genetic engineering in Pakistan is constantly growing. Despite the fact that Pakistan has yet to achieve a breakthrough in this field, scientists have announced ambitions to discover new genomes for animals in order to help them develop faster and more naturally than in the past. Pakistan has a big number of experienced genetic engineers, and anyone with great ability can find lucrative employment there.

14- Doctor of Veterinary Medicine :

Doctor of Veterinary Medicine is the abbreviation of DVM and is a highly respected field in biology after 12th. A veterinarian, sometimes known as a vet, is a professional who works with both small and large animals. Students are also taught how to manage poultry and dairy farms and how to increase output. Students are exposed to clinics in medicine, surgery, and animal reproduction during their training.

Scope :

Veterinary medicine doctor's scope of practice These days, the cost of a DVM doctor is exorbitant. As we all know, four out of ten students will complete their DVM, and two of these four will complete their degree. As a result, our pet clinics have a plethora of skilled and competent veterinarians. When someone has good qualities and their degree is completed with high grades, they will be in high demand and will take advantage of every opportunity.

15- BS Hons. Zoology :

The program is well-versed in the fundamental sciences (general biology, chemistry, and arithmetic) required to comprehend the most recent findings in animal biology. Many of us commonly consider this as one of the best medical fields for females in Pakistan after FSc. It also provides students with a wide range of options in upper-level courses of animal biology that will enable them to pursue their careers in further fields of animal sciences.

Scope :

In Pakistan, the field of zoology is still in demand. Zoologist is one of the highest-paying careers in Pakistan. A zoologist can readily find work in a variety of animal research departments and animal treatment clinics. Aside from that, many poultry farms, cow farms, and fish farms are constantly in need of a zoologist to help them function more efficiently in order to avoid and treat animal illnesses.

16- BS Hons. Botany :

The scientific study of plants is covered in the Bachelor of Botany curriculum, which encompasses plant function, growth, usage, and evolution. Botany is the foundation of scientific fields in medical science such as agricultural sciences and forestry. Botany is the scientific study of plant structure, reproduction, growth, metabolism, diseases, development, and evolutionary connections.

Scope :

Botany enables a student to select a good professional path based on his or her interests. After earning a B.Sc. or M.Sc. in Botany, one might pursue a career as a Botanist, specializing in any discipline of botany. Botany offers a variety of important courses such as mathematics, chemistry, and others. B.Sc Botany permits you to specialize in your subject of interest, such as ecologist, taxonomist, forester, plant biochemist, and many more.

17- B.Sc Nursing :

The Bachelor of Science in Nursing degree is a four-year curriculum that prepares graduates to offer safe, competent, and compassionate nursing care that is based on theory and professional standards. Relational practice, leadership, critical nursing inquiry, and care ethics are all incorporated into the program.

Scope :

Candidates should be aware of the many employment kinds accessible after completing the B.Sc Nursing program. We'd like to point out that the following are the primary employment kinds accessible in the category of B.Sc Nursing:

1. Nursing director
2. The administrator of a nursing department
3. Forensic nurse

18- BS Hons Clinical Psychology :

Clinical psychology degrees educate students on theories and therapeutic strategies that will help them address undesired psychological behaviors in clients or patients while also promoting self-discovery, well-being, and personal growth. Clinical psychologists can conduct psychological exams, diagnose mental, emotional, and behavioral disorders, such as depression, anxiety, addictions, eating disorders, and learning difficulties, and then propose therapy. Joining this field in biology after your 12th can be one of the best decisions of your life.

Scope :

Clinical psychology has a large scope in Pakistan. You can simply start your own private clinic or work at a public or private hospital. If you fail the MCAT but still want to be a doctor, clinical psychology is clearly one of the greatest professions to study.

19- Forensic Chemistry :

Students interested in jobs as scientists in criminal investigation and law enforcement should get a B.S. in forensic chemistry. Analytical chemistry is used in forensic chemistry to help the justice system identify and quantify compounds seized at a crime scene. Students learn criminal investigative processes, take appropriate chemistry and biology classes, and complete a summer internship in a crime lab.

Scope :

Because of the high rate of criminal activity in Pakistan, forensic chemistry has a large reach. We'll need some skilled forensic scientists to perform a comprehensive investigation. In Pakistan, every state requires a forensic science department to investigate a crime.

20- BS Radiology :

Radiology Technology is a medical professional education that teaches students how to utilize medical imaging tests to identify and cure disorders in people's bodies. Diagnostic Radiology is concerned with the use of imaging techniques such as X-ray radiography, Computed Tomography (CT), nuclear medicine, and ultrasonography.

Scope :

Radiology offers a wide range of job options. The demand for radiographers has risen as medical research and technology have progressed. You can look into a wide range of work options in both the public and private sectors that will assist you in achieving your goals. Here are some job options for you to consider:

1. Radiology Technician
2. Radiology Assistant
3. Radiology Nurse
4. Ultrasound Technician
5. Radiologist

Group: ARTS :

1. BS in English Literature :

This program focuses on the study of English literature, language, poetry, prose, drama, and cultural studies. Students explore both classical and modern literary works.

Scope:

Graduates can pursue careers in teaching, content writing, editing, publishing, media, translation, and even in NGOs, corporate communication, or public relations.

2. BS in Urdu Literature :

This program focuses on the study of Urdu language, literature, and culture. It covers classical and modern Urdu poetry, fiction, prose, and plays.

Scope:

Graduates can work as Urdu language teachers, writers, journalists, translators, editors, or content creators in the media industry, publishing houses, and government departments.

3. BS in History :

The program covers historical events, movements, and cultures, with a focus on both ancient and modern history. Students learn about historical research methods, world history, and regional histories.

Scope:

Graduates can work as historians, teachers, researchers, museum curators, or archivists. Careers in government research organizations, media, and cultural heritage preservation are also options.

4. BS in Philosophy :

This program explores the key philosophical theories and ideas, including ethics, logic, metaphysics, epistemology, and political philosophy. Students analyze philosophical texts and thinkers.

Scope:

Graduates can become philosophers, teachers, writers, or work in research, law, counseling, or think tanks. Philosophical training also benefits careers in politics and public policy.

5. BS in Fine Arts :

Focuses on the study and creation of visual art forms, including painting, sculpture, graphic design, and digital arts. Students learn technical skills along with art theory and history.

Scope:

Graduates can pursue careers as artists, art teachers, curators, graphic designers, illustrators, or work in media and advertising industries. Freelancing and owning art galleries are also viable career paths.

6. BS in Music :

This program covers music theory, history, performance, and composition. Students study various music genres, vocal and instrumental techniques, and music production.

Scope:

Graduates can work as musicians, music teachers, composers, sound designers, or music producers. They can also pursue careers in the entertainment industry, media, and event management.

7. BS in Linguistics :

The study of language, its structure, phonetics, syntax, semantics, and sociolinguistics. Students explore how languages evolve and how they relate to culture and society.

Scope:

Graduates can work as linguists, language teachers, translators, editors, or in language development projects for media, education, and research institutions.

8. BS in Political Science :

This program explores political theory, international relations, political systems, governance, and public policies. Students learn about the political processes, ideologies, and institutions.

Scope:

Graduates can pursue careers in government, diplomacy, international organizations, political consultancy, public relations, or work as political analysts, journalists, or in NGOs.

9. BS in International Relations :

Focuses on the study of global politics, diplomacy, international organizations, conflicts, and treaties. Students gain a deep understanding of international law, human rights, and global cooperation.

Scope:

Graduates can work in foreign services, diplomacy, international NGOs, government agencies, research institutions, or as foreign affairs analysts and policy advisors.

10. BS in Geography :

This program focuses on the study of physical geography, human geography, environmental studies, and cartography. Students learn about the relationship between people and their environment.

Scope:

Graduates can work in urban planning, environmental consultancy, disaster management, geography teaching, or with governmental and non-governmental organizations involved in resource management.

11.BS in Journalism and Mass Communication :

This program teaches students the fundamentals of journalism, reporting, media ethics, news writing, and broadcasting. It includes training in digital media and multimedia communication.

Scope:

Graduates can become journalists, reporters, editors, public relations specialists, social media managers, or work in media houses, advertising, and public relations firms.

12.BS in Sociology :

This program explores human society, social behavior, social institutions, and issues such as crime, poverty, inequality, and social change. Students learn research methods and social theories.

Scope:

Graduates can work as sociologists, social researchers, human resource managers, social workers, or in government and NGOs focusing on community development, social welfare, and policy research.

13.BS in Arts Education :

Focuses on teaching methodologies, educational psychology, curriculum development, and the integration of arts in education. It prepares students to teach art and related subjects at the school level.

Scope:

Graduates can work as teachers in schools or educational institutions, curriculum developers, education officers in government or private organizations, or in arts education outreach programs.

14.BS in Archaeology :

The study of ancient cultures, civilizations, and artifacts. Students learn excavation techniques, historical preservation, and archaeological research methods.

Scope:

Graduates can work in archaeology research, museums, heritage management, or as cultural heritage consultants in government and private sectors.

15. BS in Public Administration :

This program covers the study of governance, public policy, management of government resources, and public service. Students also learn the functioning of governmental institutions and civil services.

Scope:

Graduates can work as public administrators, policy analysts, civil servants, or in governmental organizations, NGOs, and think tanks.

Group: Computer Science :

Here is a list of **BS (Bachelor's) level degrees in Computer Science (CS)** offered at various universities in Pakistan, along with their career scope:

1. BS in Computer Science :

This is the foundational program for Computer Science, covering areas like programming, algorithms, data structures, databases, software engineering, operating systems, and computer networks.

Scope:

Graduates can work as software developers, system analysts, network engineers, web developers, or in IT management, cybersecurity, and research roles across various sectors like tech companies, government, and academia.

2. BS in Software Engineering :

This program focuses on software development life cycles, programming languages, software architecture, project management, and quality assurance. It also includes courses in databases, algorithms, and testing methodologies.

Scope:

Graduates can pursue careers as software engineers, application developers, quality assurance testers, or IT project managers in tech firms, consulting companies, and software development companies.

3. BS in Information Technology :

This program blends computer science with information systems and IT management. It covers programming, networking, databases, and system administration, along with business processes and IT infrastructure.

Scope:

Graduates can work in IT support, system administration, network management, database administration, or as IT consultants in a variety of industries, including healthcare, finance, and education.

4. BS in Artificial Intelligence :

This specialized program focuses on the study of intelligent systems, machine learning, data science, neural networks, natural language processing, and robotics. It is aimed at students interested in building intelligent applications and systems.

Scope:

Graduates can work as AI developers, machine learning engineers, data scientists, or research scientists in AI labs, tech companies, or specialized fields like robotics, healthcare, and autonomous vehicles.

5. BS in Data Science :

Data Science combines computer science, statistics, and machine learning to analyze and interpret large datasets. This program covers data analytics, big data, artificial intelligence, and data mining techniques.

Scope:

Graduates can work as data scientists, data analysts, machine learning engineers, or in big data analytics roles across sectors like technology, finance, healthcare, and government.

6. BS in Cyber Security :

This program focuses on securing networks, systems, and data from cyber threats. It covers areas like cryptography, ethical hacking, network security, digital forensics, and risk management.

Scope:

Graduates can work as cybersecurity analysts, ethical hackers, penetration testers, network security engineers, or IT security consultants in tech companies, government organizations, or cybersecurity firms.

7. BS in Computer Engineering :

This program blends computer science and electrical engineering, covering both hardware and software design. Topics include microprocessor systems, embedded systems, digital circuits, and operating systems.

Scope:

Graduates can work as computer engineers, hardware designers, embedded systems engineers, or in roles related to system architecture, design, and development for industries like telecommunications, manufacturing, and technology.

8. BS in Cloud Computing :

This program focuses on cloud services and technologies such as virtualization, distributed computing, cloud storage, and cloud security. It teaches the deployment and management of applications and services in the cloud.

Scope:

Graduates can pursue careers as cloud engineers, cloud architects, cloud administrators, or in cloud consultancy roles with companies offering cloud services like Amazon Web Services (AWS), Microsoft Azure, or Google Cloud.

9. BS in Mobile App Development :

This program is focused on the development of mobile applications for platforms like iOS and Android. It covers mobile programming, app design, user experience, and the integration of mobile apps with cloud and web services.

Scope:

Graduates can work as mobile app developers, iOS or Android developers, mobile UI/UX designers, or in mobile development consultancy.

10.BS in Game Development :

This specialized program focuses on the design, development, and testing of video games. It includes programming, graphics, animation, game engines, and interactive media design.

Scope:

Graduates can work as game developers, game designers, game testers, and in roles in the gaming industry for mobile, console, and PC gaming development.

11.BS in Networking and Telecommunications :

This program covers the design, management, and security of computer networks and telecommunications systems. Students learn about network protocols, network administration, wireless communication, and network security.

Scope:

Graduates can work as network administrators, network engineers, telecommunications engineers, or in roles like systems analysts or IT consultants for telecommunications firms, government agencies, or tech companies.

12.BS in Web Development :

This program focuses on the development of websites and web applications. It covers front-end development (HTML, CSS, JavaScript) and back-end technologies (databases, server-side scripting, and web frameworks).

Scope:

Graduates can work as front-end developers, back-end developers, full-stack developers, or web designers in digital agencies, tech companies, and startups.

13.BS in Artificial Intelligence and Robotics :

This program focuses on the integration of artificial intelligence with robotics, covering topics like machine learning, robotic automation, autonomous systems, and AI algorithms in robotics.

Scope:

Graduates can work as AI/Robotics engineers, automation specialists, robotics researchers, or in the development of intelligent robots for industries like healthcare, manufacturing, and defense.

14.BS in Blockchain Technology :

This program focuses on the fundamentals of blockchain systems, cryptographic principles, smart contracts, decentralized applications (dApps), and the use of blockchain in various sectors like finance, supply chain, and healthcare.

Scope:

Graduates can pursue careers as blockchain developers, blockchain architects, cryptocurrency specialists, or blockchain consultants in fintech, software development, and blockchain-based startups.

15.BS in Human-Computer Interaction (HCI) :

This interdisciplinary program focuses on the study of how people interact with computers and technology. It covers areas like user experience (UX) design, usability testing, interface design, and cognitive psychology.

Scope:

Graduates can work as UX designers, UI designers, interaction designers, usability researchers, or product designers in tech companies, game development, and product development firms.

16.BS in Computational Mathematics :

This program merges computer science and mathematics, focusing on algorithmic problem-solving, computational theory, data analysis, and mathematical modeling. It emphasizes the mathematical foundations of computing and numerical methods.

Scope:

Graduates can work as computational scientists, quantitative analysts, operations researchers, data analysts, or in software development and academic research.

17.BS in IT Management :

This program blends computer science and business management, covering IT infrastructure, project management, IT strategy, and digital transformation. Students learn how to manage and lead IT teams and projects.

Scope:

Graduates can work as IT managers, project managers, business analysts, or IT consultants in tech companies, corporate sectors, and government organizations.

18.BS in Digital Marketing and E-commerce :

This program focuses on the use of technology in marketing, including digital marketing strategies, e-commerce platforms, data analytics, search engine optimization (SEO), and social media marketing.

Scope:

Graduates can work as digital marketers, e-commerce managers, content strategists, SEO specialists, or in online business management, marketing agencies, or e-commerce startups.

19.BS in IT Entrepreneurship :

This program is designed for students interested in launching their own tech startups. It covers entrepreneurship principles, business management, technology commercialization, and venture capital.

Scope:

Graduates can start their own tech businesses, work as startup founders, or take up roles in tech innovation hubs, incubators, and entrepreneurship consultancy firms.

20.BS in Computational Biology :

A specialized field at the intersection of computer science and biology, this program focuses on the use of computational tools and techniques to analyze biological data, especially in genomics and bioinformatics.

Scope:

Graduates can work as bioinformaticians, computational biologists, researchers in genetic labs, pharmaceutical companies, or healthcare institutions.

21.BS in Quantum Computing :

This cutting-edge program focuses on quantum theory, quantum mechanics, quantum algorithms, and quantum programming languages. Students learn to apply these concepts to computational problems that traditional computers struggle with.

Scope:

Graduates can work in quantum computing research, quantum algorithm development, or roles in tech companies and startups focused on developing quantum computing technology.

22.BS in Data Engineering :

This program teaches students how to design, build, and maintain large-scale data processing systems. It covers database management, big data technologies, cloud computing, and data warehousing.

Scope:

Graduates can work as data engineers, data architects, cloud architects, or in roles involving big data analytics, managing data pipelines, and data infrastructure.

23.BS in Digital Forensics :

This program focuses on the application of computer science principles to the investigation and recovery of digital evidence from cybercrimes. Topics include computer forensics, digital evidence analysis, and ethical hacking

Scope:

Graduates can work as digital forensics experts, cybercrime investigators, ethical hackers, or in cybersecurity firms and law enforcement agencies involved in criminal investigations.

24.BS in Computational Neuroscience :

This interdisciplinary program blends neuroscience, computer science, and psychology. It focuses on simulating and modeling neural systems, brain functions, and applying computational techniques to understand the human brain.

Scope:

Graduates can work in neurotechnology firms, research institutes, healthcare, or as computational neuroscientists exploring the intersection of AI and brain science.

25.BS in Computational Finance :

This program integrates computer science with finance, covering quantitative finance, algorithmic trading, financial modeling, and computational tools used in financial markets.

Scope:

Graduates can work in financial institutions, hedge funds, banks, or tech companies offering fintech solutions, in roles such as quantitative analysts, financial modelers, or algorithmic traders.

Additional Career Scope of Computer Science Degrees in Pakistan:

1. **Tech Industry:** Graduates can pursue diverse careers in the tech sector, including roles in software development, AI, blockchain, game development, and cloud computing.
2. **Cybersecurity and Digital Forensics:** As the demand for security increases, professionals in cybersecurity, ethical hacking, and digital forensics are highly sought after by both government and private organizations.
3. **Healthcare Technology:** Fields like computational biology, bioinformatics, and computational neuroscience offer opportunities to work at the intersection of tech and healthcare, contributing to medical research and innovations.

4. **E-commerce and Digital Marketing:** With the growth of online businesses, degrees focusing on e-commerce and digital marketing are becoming increasingly relevant for tech-savvy marketing professionals.
5. **Data Science and AI:** Graduates specializing in data science, machine learning, AI, and big data analytics can work in industries ranging from finance to healthcare, playing a vital role in data-driven decision-making.
6. **Entrepreneurship and Startups:** Technology-driven entrepreneurial ventures are booming, and graduates with business acumen and technical skills in IT entrepreneurship can become successful startup founders or join innovation hubs.
7. **Software Development:** Graduates can become software engineers, application developers, or web developers working in various tech companies.
8. **Cybersecurity:** As cyber threats continue to grow, cybersecurity experts are in high demand, offering career opportunities in IT security, ethical hacking, and digital forensics.
9. **Artificial Intelligence and Data Science:** Both AI and data science are rapidly growing fields, with opportunities for machine learning engineers, data scientists, and research roles.
10. **Networking and Cloud Computing:** With the growth of cloud services and network infrastructure, there is a demand for network engineers, cloud architects, and telecommunications experts.
11. **Gaming and Mobile App Development:** The gaming industry and mobile app sector continue to grow, offering opportunities for developers and designers.
12. **Education and Research:** Graduates can also pursue further studies (MS, PhD) and careers in academia and research institutions, especially in emerging fields like AI and cybersecurity.

These BS programs in Computer Science offer students specialized knowledge in emerging and high-demand areas of technology, preparing them for diverse and rewarding careers in the rapidly evolving tech industry.

The **Computer Science** field in Pakistan offers a wide range of specialized programs catering to the growing demands of the tech industry, and these degrees open up a variety of rewarding career opportunities in both traditional and emerging sectors.

Group: Social Sciences :

1. BS in Sociology :

Focus: Social behavior, social institutions, social issues, and social change.

Offered by: University of the Punjab, University of Karachi, University of Peshawar, and others.

2. BS in Psychology :

Focus: Human behavior, mental processes, counseling, clinical psychology, and industrial psychology.

Offered by: University of the Punjab, University of Karachi, Aga Khan University, and others.

3. BS in Political Science :

Focus: Political theory, international relations, political systems, governance, and public administration.

Offered by: University of the Punjab, University of Karachi, International Islamic University Islamabad, and others.

4. BS in Economics :

Focus: Microeconomics, macroeconomics, development economics, economic policy, and economic theory.

Offered by: Lahore University of Management Sciences (LUMS), University of the Punjab, Institute of Business Administration (IBA) Karachi, and others.

5. BS in Anthropology :

Focus: Human evolution, cultural studies, ethnography, biological anthropology, and archaeology.

Offered by: Quaid-i-Azam University, University of Peshawar, and others.

6. BS in Social Work :

Focus: Social welfare, community service, counseling, and social justice.

Offered by: University of the Punjab, University of Karachi, University of Peshawar, and others.

7. BS in Communication and Media Studies :

Focus: Journalism, media management, digital media, mass communication, and public relations.

Offered by: University of the Punjab, University of Karachi, and others.

8. BS in Gender Studies :

Focus: Gender theory, feminist studies, social roles, equality, and human rights.

Offered by: Fatima Jinnah Women University, University of Karachi, and others.

9. BS in International Relations :

Focus: International politics, diplomacy, global conflicts, and international organizations.

Offered by: Quaid-i-Azam University, University of Karachi, and others.

10. BS in Public Administration :

Focus: Governance, public policies, administration, and public sector management.

Offered by: University of the Punjab, University of Karachi, and others.

11. BS in Geography :

Focus: Physical geography, human geography, environmental studies, and spatial analysis.

Offered by: University of the Punjab, University of Karachi, and others.

12. BS in History :

Focus: World history, historical research, and the impact of past events on contemporary society.

Offered by: University of the Punjab, University of Karachi, and others.

13. BS in Philosophy :

Focus: Philosophical theories, logic, ethics, and metaphysics.

Offered by: University of the Punjab, University of Karachi, and others.

14. BS in Linguistics :

Focus: Study of language, phonetics, syntax, semantics, and language development.

Offered by: University of the Punjab, Allama Iqbal Open University, and others.

15. BS in Tourism and Hospitality Management :

Focus: Tourism industry, hospitality management, customer service, and travel business.

Offered by: Institute of Business Administration (IBA) Karachi, University of the Punjab, and others.