

PROSPECTUS 24-2025

Gwadar: A Picturesque City

ACKNOWLEDGMENT

The prospectus serves as a comprehensive guide for students, providing essential information about academic programs, admission procedures, registration, attendance, examinations, facilities, fee structure, scholarships, academic policies, and regulations. Every effort has been made to ensure the accuracy and completeness of the information presented in this document. However, we acknowledge the possibility of human errors or omissions. We welcome constructive feedback from all stakeholders to further enhance the quality and accuracy of this document.

I extend my sincere gratitude to the esteemed faculty members and administrative staff whose valuable contributions were instrumental in the preparation of this prospectus. In particular, I would like to acknowledge the efforts and support from Ghulam Sarwar, Nasir Ali, and Nasrullah for data collection designing, and formatting the document.

Furthermore, I am deeply grateful to the deans, directors, and heads of academic and administrative departments for their cooperation and valuable input. I must also acknowledge the pivotal role of Prof. Dr. Abdul Razzaq Sabir (TI) Vice Chancellor, University of Gwadar, and Prof. Dr Syed Manzoor Ahmed, Pro Vice-Chancellor, whose guidance and supervision were integral to the successful completion of this prospectus.

NASEER AHMED Public Relations Officer University of Gwadar

*Omani Fort Gwadar (19th Century)

CONTENTS

Welcome to University of Gwadar

- 04 Slogan, Vision and Mission
- 05 Chancellor Message
- 06 Vice Chancellor Message
- 07 Pro-Vice Chancellor Message

Campus Life

- 09 Genesis
- 10 Administration
- 11 Examinations
- 15 IT Directorate
- 16 Facilities

Faculty of Management Sciences, Commerce And Social Sciences

- 21 Dean Message
- 22 Department of Commerce
- 33 Department of Economics
- 40 Department of Education
- 49 Department of English
- 54 Department of Managment Sciences

Faculty of Sciences, Engineering and Technology

- 64 Dean Message
- 65 Department of Chemistry
- 70 Department of Computer Science
- 93 Department of Zoology

General Information

- 97 Student Affairs
- 98 Quality Enhancement Cell
- 99 ORIC
- 100 Directorate of Public Relations
- 101 Fiancial Aid
- 102 Library & Hostle
- 103 Our Testimonal

105 Location



UNIVERSITY OF GWADAR

SLOGAN

KNOWLEDGE

WISDOM

SERVICE

VISION

Ensure the access of education to the farthest reaches of country with a state of the art education system and be the institute of choice for higher learning.

MISSION

The mission of the University of Gwadar (UG) is to carve out an educational niche for itself through innovation in modern pedagogy. To be the first university in balochistan that reflects an international range in its courses and program design.

University of Gwadar

Message from Chancellor

The newly established University of Gwadar has become harbinger of Change in the field of higher education in the Makran region in general and in the port city of Gwadar in particular. It is hoped that Gwadar University will open new educational vistas for the young blood of Makran region and will equip the students with guality education. The students of this University can effectively contribute towards the on-going leading projects of China Pakistan Economic Corridor (CPEC) at Gwadar for boosting of economic activities. The establishment of the University of Gwadar would go a long way in honing socio economic indicators in the province.



Furthermore, the strategic location of the University of Gwadar makes it an ideal hub economic uplift entire of of socio of the province Balochistan. Access to quality education is the right of every citizen. It is also the social and moral responsibility of every individual to strive for improving his/her educational standard. The Holy Prophet SAW said, "Seek education from cradle to grave". The World history bears testimony to these golden words. So the only way for competing with the challenges of modern era is quality education which is impossible without quality educational institutes.

It is certainly commendable that the University of Gwadar is on the path of progress and achieving its set objectives. My sincere support will always remain with the University of Gwadar for leaving no stone unturned in disseminating of higher education in order to produce highly skilled and trained human resource.

I am optimistic that the management and faculty of University of Gwadar would continue its efforts for adorning the youth of province with the ornament of education in a professional and dedicated manner that in turn would burnish the image of province.

Sheikh Jaffar Khan Mandokhail

Governor Balochistan / Chancellor University of Gwadar

From the Vice Chancellor

Thank you for choosing the University of Gwadar for your higher studies. In fact, in the modern era advanced knowledge is the most important to professional and economic contributor development. The University of Turbat was established through a charter issued by the Governor Balochistan on May 28th, 2012. UoT is the second general highest seat of learning in the public sector in Balochistan having noble task to provide higher education to the people of Mekran Division which is one-fifth of the entire area of the province.



The people of Gwadar are keen to achieve higher education; in the past, to seek higher education

at their doorsteps has remained a dream of the people of Gwadar. The dream by the people of Gwadar to acquire higher education at their door steps was converted into veracity when University of Gwadar established. The University of Gwadar at Gwadar is in its preliminary phase of establishment

Being the first and founder Vice Chancellor of University of Gwadar I welcome the students from Gwadar and neighboring districts with the expectations that their stay would be worthwhile for the region and their own future career.

Education of the modern times hinges around creativity, skill-development and innovation. It is need of the hour that the academic degrees should be supplemented with the value addition of innovative approach, creative mindset and practical knowledge. This purpose can only be achieved when a university applies unconventional grounds and its students also accept them with desire. I desire to focus to initiate and flourish such academic atmosphere and culture at newly established University of Gwadar at Gwadar to make this University a center of excellence in teaching, research and innovation, and its services at local, national and international levels.

It is pertinent to mention here that University of Gwadar is among the newly established universities in the country establishing trends in online instructions. The efforts of all administrative staff, Heads of Departments, faculty members and students e are hereby acknowledged for taking keen interest to bring University of Gwadar in the leading universities of the Country very soon Insha'Allah.

Prof. Dr. Abdul Razaq Sabir (TI)

Vice Chancellor

From the Pro Vice Chancellor

Welcome to the prestigious University of Gwadar which is characterized by its excellent teachinglearning environment and diversity in its programs to prepare the students in response to recent technological advancements and global challenges. Our major objective is to create a platform for free and open exchange of a wide range of ideas in a culture of mutual respect, where our shining students can meaningfullycontribute to provide innovative solutions to the public and private organizations within the country and abroad. Our competent faculty strives to impart the most advanced analytical and specialized skills in our students to contribute for the betterment of our nation. We believe that innovation requires an optimized blend of engineering, technology, social



sciences and business applications to be compiled together in an interdisciplinary fashion.

Advanced labs, innovative & interactive teaching methodologies, qualified & experienced faculty, conducive research opportunities, and academia-industry linkages have all been merged to place University of Gwadar among top emerging universities of Pakistan. University of Gwadar is distinguished for its progressive curriculum design that mainly focusses on problem-solving capabilities, industrial-specific objectives, creative design abilities, and interdisciplinary research methodologies. Our students really enjoy an interactive learning experience that goes beyond merely learning tools or knowledge, but development of critical thinking and provision of solutions to complex problems. University of Gwadar's academic prospects are balanced with campus lifestyle which provides numerous extracurricular activities such as sports, literary, debating, cultural adventurous and social events.

The University believes in constant improvement; therefore in this connection, each degree program is assessed periodically against its pre-defined outcomes. This gives the University a chance to know the quality of its graduates apropos the requirements of the industry or employers. Based on stake holder's feedback, appropriate remedial actions are taken, where necessary, to stay abreast with technological and industrial needs.

If you wish to become a successful professional or entrepreneur, then join us. I would like to welcome you at University of Gwadar to study the most demanding and challenging discipline of your choice.

Prof. Dr. Syed Manzoor Ahmed

Pro-Vice Chancellor

Campus Life



Genesis

Establishment of University of Gwadar

The University of Gwadar was formally operationalized and started functioning as a fullfledged autonomous university as University of Gwadar soon after appointing a Vice Chancellor for University of Gwadar by Governor Balochistan on 25th October, 2021. Earlier it remained a Sub Campus of University of Turbat form September, 2016 to October, 2021 and then transformed into a full-fledged university as University of Gwadar on 25th October, 2021.

The Honorable Governor of Balochistan appointed Prof. Dr. Abdul Razzag Sabir as the first Vice Chancellor of University of Gwadar on 25th October, 2021. The first Vice Chancellor of University of Gwadar assumed the charge on Friday 29th October, 2021. The University of Gwadar (formerly known as UoT's Gwadar Campus) started its academic activities from January 2017 in a portion of the building of Govt. Boys Degree College Gwadar. The University offers four BS programs in the fields of Management Sciences (BBA), Computer Science (BSIT), Education (B.Ed. Hons) and Commerce (BS Commerce).

Background

After thorough deliberation and approval of the recommendations towards establishment of a Sub Campus of University of Turbat (UoT) at Gwadar from different meetings and statuary bodies, the proposal was finally presented in the UoT's apex statuary body (the Senate) during its first meeting chaired by the Honorable Governor Balochistan/ Chancellor PSUs, held on March 30th, 2016 at University's Public Library at Turbat.

In pursuance of principle approval by the Honorable Governor Balochistan, the Higher Education Commission (HEC) of Pakistan issued a notification on July 4th, 2016 to set up a Sub Campus of University of Turbat at CPEC central city Gwadar.

Establishment of UoT's Gwadar Campus

The Gwadar Campus of University of Turbat was established during September 2016, under the project "Establishment of Sub Campuses of Public Sector Universities at district Level Phase-I"

initiated by HEC with a vision that the same campus will be upgraded in to a full-fledged university, as "University of Gwadar" of international standard in the near future. And now the same campus has been upgraded as University of Gwadar in October, 2021.

Existing Enrollment and Faculty

The first admissions in four BS Programs were announced on August 31st, 2016 while applications for the position of Lecturer were invited on October 18th, 2016. The number of regular faculty members is 15 while 28 are providing services as Visiting Faculty. At present around 400 students are enrolled in the University.

Recognition of Campus by HEC

Recognition of Campus by HEC The HEC accorded formal recognition of Sub Campus of University of Turbat at Gwadar in September 2018. Here it's worth mentioning that among all sub-campuses (09) of different universities were set up in Balochistan under this project by the HEC; the UoT's Gwadar Campus was the first one which was issued NOC by the HEC and included it in the list of recognized Sub Campuses of Public Sector Universities of HEC Universities of HEC.

Aims and Objectives

The primary objective of the university is to give students with high-quality, comprehensive educational and training possibilities that are adaptable to their changing requirements. The university's academic programs aim to provide students with the skills they'll need to succeed in a quickly evolving world and prepare them with the challenges of the 21st century. To reach the aim, the Institute works to produce individuals with a solid foundation in education and research, as well as the capacity and vision to lead the way.

The university's environment and infrastructure support academics and students in reaching their full potential for scholarship, creative work, professional growth, and service. Among order to accomplish its objective, the University of Gwadar cultivates a sense of responsibility in its students.

Office of the Registrar

Introduction

The Registrar office is the backbone of the university in the sense that it keeps registration and official records of all the enrolled students and the employees. The University Registrar is responsible for maintaining student academic records and course data, including helping students schedule and register for classes to ensure their academic performance meets graduation requirements.

The main task of the Registrar office is to shoulder the overall administrative responsibilities of the university. The Registrar function as the hub of academic and administrative activities of the university.

The Office of the Registrar is committed primarily to the service of faculty and students through scheduling, registration, record keeping and reporting as well as assisting the deans and other administrative offices in their service. The office also supports the university community in matters pertaining to transcripts, academic calendars, academic policies and the course catalogue and degree verifications.

We act as a facilitator for students, faculty, and staff as they pursue the academic goals of the university. The Office of the Registrar provides a welcoming and encouraging environment, maintaining the integrity, accuracy, and appropriate confidentiality of academic records at Gwadar University.



MR. ABDUL MAJID Deputy Registrar



MR. AMIR IMAAM P.A to Registrar



MR. SARWAR HUSSAIN Junior Clerk



MR. DURJAN Office Assistant



University of Gwadar

Controller of Examinations Office

Introduction

The Office of Controller of Examinations University of Gwadar was established with the approval of the university ordinance in 2021. It plays a vital role in the smooth functioning of the university and it is considered the backbone of the university. The Office of the Controller of Examinations is working in compliance with the HEC and other relevant accreditation bodies. The Controller of Examinations Office deals in all matters related to examinations. This office ensures the necessary confidentiality of the record. It also ensures the issues related to examinations as per examination policies & academic rules & regulations. Any kind of ambiguity in this regard is clarified through the University Examination Committee and other statutory bodies.

Vision

To adopt the latest examination trends, and tools, including the E-Examination system to smoothen the journey towards "Quality and Excellence in Education" so that degrees, transcripts, verification of testimonial/academic records, and requisite information can be extracted as and when required, It will enable us to be compared and ranked with the top Universities

Mission

To safeguard all the Examination records, including award lists, and student grades, issue Transcripts, Detail Marks Sheets, and Degrees to the Qualifier as per record, and facilitate students to get their testimonials. To act as the active ingredient to achieve "Quality and Excellence in Education".





Exams













Examination

Semester Freeze Policy

- Student can freeze a semester and will resume his/her studies from the same stage where froze.
- No freezing during the semester will be allowed. The maximum duration of the degree program shall remain the same.

Note: freezing of semester will only be allowed after successful completion of 1st semester as prerequisite or the case may be for other semester's predecessor to the freezing semester.

Examinations Office

The Examination Office works under the supervision of Director Admissions & Examinations. This office is responsible for preparing class and examination schedules, holding of semester's examinations, maintenance and compilation of results issuance of semester result reports, transcripts, certificates and degrees.

Credit Hour System

The credit hours assigned to a theory or a laboratory courses are determined by the contact hours allocated to it per week throughout a semester. For a theory course one credit hour is equivalent to one contact hour of lecture per week, and for a laboratory course, three contact hours of practical work per week constitute one credit hour.

Semester Credit Load

Students can normally register in accordance with his / her degree program, 15-18 credit hours in a semester. No exception to this upper limit is allowed to regular students. However, in later years this limit may be relaxed for those who are repeating courses, with the approval of the Department Chairperson. Under all cases the maximum limit remains 24 credit hours.

Degree Requirements

For a Bachelor degree a student must earn a minimum of 124 to 136 credits, depending upon his / her Department. At the time of graduation, the Cumulative Grade Point Average (CGPA) should not be below 2.00.

Course Codes

The courses are identified by the course numbers, which consist of two letters and three digits. The first two letters represent the major field; the first digit indicates the level of course; the last two digits represent the sequence number of course offered in the same area.

Student Evaluation

Students are evaluated by mid-semester test, home assignments, quizzes, case studies, course project, laboratory reports, oral tests and with the final-term examination. The weight allocated to them depends upon the nature of the course. The marks distribution are represented below:

Nature of Examination	Percentage
Sessional Marks	30%
Mid Semester Exam	30%
Terminal Exam	40%

Examination

Grading System

Depending upon academic performance, students are awarded grades A, A-, B+, B-, C+, C, C-, D+, D, F, for each course. These grades indicate the following levels of performance:

Percentage of Marks	GPA	Grade
85 and above	4.00 - 4.00	A
80-84	3.70 - 3.90	A-
75-79	3.40 - 3.60	B+
70-74	3.00 - 3.30	В
65-69	2.50 - 2.90	C+
60-64	2.00 - 2.40	С
50-59	1.00 - 1.90	D
Less than 50	0.00	F

Supporting documents for Admission Form Submission

- 1. Attested copy of Secondary School Certificate
- 2. Attested copy of Higher Secondary School Certificate
- 3. Attested copy of the Applicant's CNIC / B-form
- 4. Attested copy of Local/Domicile
- 5. Bank draft/pay order/receipt of cash payment (admission processing fee)
- 6. Six recent photographs (passport size)
- 7. Attested copy of CNIC of the applicant's father/guardian
- 8. Attested copy of Character Certificate from the last institute attended.



Undergraduate Prospectus 2025

Directorate Information Technology

Introduction



Information Technology directorate is the backbone of any organization Organizations are empowering their Information and Technology departments to meet the challenges of modern era. The Directorate of Information Technology at University of Gwadar has been established to support and strengthen quality higher education and Research in the institute. It is mandated to provide IT standards, guidelines and policy, strategic plan, and development in the University. The directorate maintains oversight for matters delegated under this jurisdiction, and acts authoritatively within the scope of established policies, procedures, and guidelines for its operations. Directorate of IT strives to provide dedicated Services to Students, Faculty, Administration. The Services being provided by IT Directorate Include:

1. Internet Connectivity Through Pakistan Education Research Network (PERN 2):

PERN is a subsidiary organization of Higher Education Commission which connects and provides ICT services to Educational Institutes and R&D Organizations. The University of Gwadar is connected to PERN with @60 Mbps dedicated bandwidth. Internet Services are being provided to all the campuses/building as well as hostels and other residential areas through ethernet cables and Wifi-hotspots, managed via Local Area Network (LAN) of UG.

2. State of the Art Computer Labs:

PERN is a subsidiary organization of Higher Education Commission which connects and provides ICT services to Educational Institutes and R&D Organizations. The University of Gwadar is connected to PERN with @60 Mbps dedicated bandwidth. Internet Services are being provided to all the campuses/building as well as hostels and other residential areas through Ethernet cables and Wifi-hotspots, managed via Local Area Network (LAN) of UG.

3. Web Administration:

University of Gwadar has a fully functional up to date website. The website contains all the information and updates related to the structure and regular activities of the university. It will be embedded with student information portal in near future.

4. Email Administration:

Official correspondence at UG is being done using official email Ids provided to the staff, maintained by IT Directorate. Furthermore, the students have also been assigned official email Ids for LMS services.

5. Access to Licensed Software:

The staff and students are being provided licensed software services like Windows 10/11, Microsoft Office, Microsoft Office 365, Visual Studio, Turn it in and many other software products.

6. Video Conferencing.

7. Surveillance Systems – 24/7 Campus Security & Video Surveillance.

8. Telephone connectivity across the campus offices.

- 1. Establishment of a Data Center at the University Campus.
- 2. Establishment of A1 & Data Science Computer Laboratory
- 3. Complete Fiber Optic Connectivity to all campus buildings
- 4. Development and deployment of Campus Management Solution
- 5. Development and deployment of Learning Management System (LMS)
- 6. Deployment of Intercom System across campus offices.

Facilities

Seminar Hall

A seminar hall is also situated in the main campus for conductng seminars, exhibitons, lecture sessions and other events. More than 100 partcipants can be seated in the seminar hall.



Cafeteria

The University of Gwadar has a well-furnished and a self-service cafeteria serving delicious fast food and snacks for campus students and faculty members. The cafeteria has seating for more than 30 students at a time with separate section for male and female students.



Facilities

Transport Services

The University of Gwadar (UG) has its own large fleet of buses, minibuses and vans that provide pick and drop facility to its students around the city. The University also provides van services to its staff & faculty members. The University also provides transport facility to its students for field work and annual picnics once a year to each department on need basis. A detailed transport plan along with specified routes can be obtained from the transport office of UG. Transport facilities are also available to the adjacent cities of Gwadar.



Study and Exposure Tour

The university organises study and exposure tours to other institutes, industries, and tourist destinations throughout the country. Students are encouraged to participate in intra-university competitions and to gain experience by visiting other universities. During these tours, students are encouraged to develop interpersonal skills with their classmates through shared learning.



Facilities

Sports Facilities

We are certain that a healthy body is necessary for a healthy mind. In this regard, the UG has invested in purposebuilt sports and recreational facilities which include spaces for table tennis, cricket, and football. A football field is also being developed for students. Sports at the University are managed by a dedicated department of sports.



Central Library

University of Gwadar has a central library that is open to all students and faculty members. The library has a large collection of books, reference materials, research journals, magazines, and periodicals. Furthermore, the library houses a wide range of specialised information, such as publications from international and national organisations and statistical data. Teachers and students have easy access to online research resources and the Internet. Downloading research materials is possible through the Pakistan Education & Research Network (PERN) facility on the HEC website.



ACADEMICS



Faculty of Management Sciences, Commerce and Social Sciences



Dean Message



Prof. Dr. Jan Muhammad

Dean (Acting) PhD(University of Karachi, PK)

Deparments:

- Commerce
 - English
- **Economics**
- **Management Sciences**
- Education

Dean Message:

Dean Message: Welcome to the University of Gwadar! As dean of the Faculty of Management Sciences, Commerce and Social Sciences, I am extremely proud of the rich tradition of providing practical, experiential-based education that our university has upheld since its founding. Our undergraduate and diploma programs prepare our students to become leaders with the moral depth and intellectual intensity necessary to meet the challenges of a time of critical transition in society. transition in society.

Located in an economic and cultural hub, the University of Gwadar offers unique opportunities for our students to engage with different companies and communities. For example, through the Capstone Experience, our students have completed different strategic consulting projects for local and national companies, entrepreneurial ventures and not-for-profit organizations. The Capstone Experience has not only benefited the business community, but has provided the perfect opportunity for our students to begin putting their education into action.

Central to the success of our students and University of Gwadar Business alumni, has been the decades of leadership and experience-based knowledge that our faculty bring into the classroom. As thought leaders in their industry, the knowledge and research contributions of our faculty continue to drive change and have a positive societal impact at the university, in the community, and across the globe.

I invite all of you who are interested in expanding your knowledge and enriching your careers to explore our university further either online or through a visit to campus. I hope that you will join our community of life-long learners.

Department of Commerce

Programs:

8

I

- BS Commerce (4 Years)
- Diploma in Accounting and Finance (1 Year)

Faculty



Mr. Zain ul Abiden

Chairperson (Acting) MS in Finance (IoBM Karachi, PK) in-Progress

Faculty

- Mr. Mujahid Hussain
 M.phil IoBM, Karachi, Pakistan in-progress
- Mr. Shah Nawaz
 MS (KAZBIT, Karachi)

Teaching Fellows

Mr. Muhammad Iqbal
 M.Phil Statistics (IIUI, Islamabad)



Introduction

The academic activities for all four departments including commerce were formally started from 16th January 2017 and Department of Commerce has successfully passed out its first batch of two years B.Com session 2017-18. After successfully passing out a two year program, the Department of Commerce has announced its BS-Commerce (4 Years) program from 2018 as Higher Education Commission (HEC) Pakistan instructed to phase out all two years bachelor programs. From 2018 onward, Commerce is currently running its BS-Commerce (4 years) and its 4th batch in the same.

After a successful journey of four (4) years as a campus, the Gwadar Campus has formally converted into a Fullfledged University as University of Gwadar on 25th October 2021 by appointing its first Vice Chancellor. Luckily, Prof. Dr. Abdul Razzaq Sabir, as first Vice Chancellor University of Gwadar took over the charge on 29th October 2021.

Department of Commerce in all Universities within a country plays a pivotal role in the promotion of commerce related activities like trade and logistic, import export, auditing and taxation, accounting and finance with all other relevant fields that are the key contributing areas of social and economic development of a nation. With the same perspective and vision, the department of



commerce along with its core team, is providing its utmost capacity to work for the region by engaging the energetic youth of society and making them to be enrolled in different programs which are running under the renowned stream known as Commerce.

The programs that we have, are designed with theoretical, conceptual and practical knowledge including Business, Economics, Finance, Banking, Auditing, Taxation, Accounting, Management, Business Law and many other fascinating subjects necessary to understand commerce stream and their implementation in real life. It also introduces practical knowledge including Industrial and Banking sector visits, capital market like Stock Exchange, Internship and report writing, projects and group works on different organization which are the biggest sources of imparting practical wisdom and understanding the real life situations while working in regional, national and international level organization around the world.

Our academic and extra-curricular activities are not limited here but the department has a vast vision and planning to include new course that best fit with the current market trend as well as to cover the future market demand. We are also committed to work with chamber of commerce which will be the biggest platform for the entire region by providing countless opportunities to the students as well as to our alumnae for representing themselves with the youth of entire country that will certainly help the society, region and economy as whole.

Vision Statement

To provide market oriented, research based Knowledge with optimal commitment and excellence in order to produce skilled youth for a sustained socio-economic development.

Objective of the department

- To create a very competitive learning environment in which students can get maximum benefit by sharing their knowledge, wisdom and experiences from two way communication regarding business organizations in the region.
- To work with the youth of region and provide countless opportunities in corporate sector by introducing wide-ranging subjects along with practical knowledge.
- To prepare the energetic youth of the region and make them capable to meet the demand of skilled, professional and experienced human resource market for future.
- To identify and fill the gap of corporate as well as public and private sector organizations in terms of professional including Accountant, Finance Analyst, Auditors, Banking Executives, Economic Analyst, Trade and Logistic Managers and so other exciting job opportunities waiting to be filled by the competent professionals.

Introduction

• To build the capacity of youth of the region in terms of critical thinking, analytical skills, problem solving abilities and practical aspects by introducing with real life situations, role playing activities, teamwork challenges as part of their academic career in different degree programs.

The Department Offer Following Programs:

(Bachelor of Science in Commerce)

The program is combined with variety of subjects which are related to to daily life situations being practiced by the every individual of the society. The courses of BS (Commerce) includes Management, Economics, Accounting, Finance, Marketing, Banking, Auditing, and Taxation as core competencies. Apart from these core courses, students will also have various supporting courses knowledge which includes, Business Communication, Sociology, Self-Management Skills, Psychology, Business Ethics, Organizational Behavior, Business Research and Business Law as to know the social and ethical values for doing a business or working at any level of public and private organization at any level of hierarchy. In this program, students will also need to be involve in different practical tasks, projects as course requirement to visit Banks, Project Management Units (PMUs), Industries, Internships in Public and Private sector organizations and different level of entrepreneurial challenges in different Universities of the country. Students will also need to prepare an internship report, or research on a business issue and a comprehensive project at the final semester of BS(Commerce) required for degree completion of the program successfully.

Program Learning Outcome (PLO)

Commerce Program is primarily designed for corporate world which aims to prepare the youth of the region to convert their dreams into the reality especially in the field of business and to contribute in different levels of corporate world so the social and economic objectives are attained. The program has several objectives which are briefly discussed below:

Academic Education

To produce business graduates, Professional and experts youth and to prepare to fill the future demand of market.

Knowledge for Solving Business Issues

To apply the basic theories, concept and practical knowledge to identify the current business related issues existing in the market and making them capable to understand the real market situations as well as to analyze the available options for solving those challenges.

Problem Analysis

Identify and collect the facts and figures regarding issues with the help of conducting different research methods, mathematical formulas, statistical representation and financial cost and benefit analysis for solving those issues and coming up with better and effective results.

Individual and Team Work

Perform, coordinate and function as team on different task to boost their team work skills, leadership qualities, role playing characters and be as an effective individuals for the tasks assigned to them during the academic career as well as in their real lives.

Language and Communication Skills

Communicate with any person, colleagues, managers, client and other hierarchical setup in an organization effective and efficient manner with the help of concept and philosophies and basics of communication.

Business Ethics

Know the limitation of organizational system, ethics for doing business or being part of any sort of private, public business organization and ignoring the practices which are illegal as well as against the ethics of business organization.

Life-long Learning

Diagnose the need and requirement of the society and have to be equipped with practical knowledge and experienced to offer the services to the society and be engaged with organization as an independent professional.

Research and Internship Report

Practically work as internee within a national level public or private sector organization in accordance with the specialized subject with a period of 6 weeks to understand the real life implementation of program subject within the organizational setup. A report after the internship is to be prepared and submitted by the internee to the Head of The Department discussing the organizational hierarchy, working environment, management, practical learning, critical thinking and recommending the organization for their weakness so the organization could get the benefit from research based and updated student of current era.

Admission Criteria

At least 45% marks in intermediate / I.Com / D.Com or equivalent certificate.

Fee Structure

Sr. No	Detail of Charges	Amount
1	Admission Fee (One-time fee)	1,500
2	Tuition Fee	6,500
3	Security Money Refundable (Onetime fee)	2,000
4	Examination fee	250
5	Identity Card	200
6	Lab fee	2,000
7	Sports Fee	250
8	Transport Fee per semester	250
9	Library Fee	250
10	Total (First Semester Fee)	13,200
	Fee per semester from 2nd to 8th	9,200

Degree Requirement for the BS Commerce

For obtaining Bachelor of Science degree in Commerce, a student has to complete Minimum 138 credit hours with a CGPA of 2.0 or above.

Course requirements for obtaining BS (Commerce) degree offered by Department of Commerce are given below;

Course Category	Course Code	Course Title	Credit hours	Total Credits
	ENG-301	Functional English	3	
Irse	MAT-301	Business Mathematics	3	
Cou	ENG-302	Business Communication	3	
sory	ENG-303	Oral Communication	3	
Compulsory Course	MAT-302	Business Statistics	3	
Cor	ITC-301	Introduction to Computer	3	
	COM-301	Islamic & Pak Studies	3	39
	COM-303	Introduction to Sociology	3	
rses	MAN-305	Business Ethics & Corporate Social Responsibilities	3	
General Courses	ECO-303	Economy of Pakistan	3	
eral	COM-302	Introduction to Psychology & Critical Thinking	3	
Gen	MAN-306	Organizational Behavior	3	
	MAN-309	International Business	3	

Course				Total
Category	Course Code	Course Title	Credit hours	Credits
	ACT-302	Financial Accounting-I	3	
	MAN-301	Introduction to Business	3	
	ECO-301	Microeconomics	3	
S O	ECO-302	Macroeconomics	3	
Foundation Courses	MAN-303	Principles of Management	3	
Ö	MAN-304	Principles of Marketing	3	
ion	LAW-301	Business Law	3	39
dat	FIN-301	Introduction to Business Finance	3	
uno	ACT-304	Cost Accounting	3	
Ŭ.	AUD-301	Principles of Auditing	3	
	TEX-301	Business Taxation	3	
	BAN-301	Money and Banking	3	
	MAN-302	Self-Management Skills	3	
Course Category	Course Code	Course Title	Credit hours	Total Credits
	ACT-302	Financial Accounting-II	3	
	ACT-303	Advanced Accounting-I	3	
	ACT-305	Advanced Accounting-II	3	
	FIN-302	Financial Management	3	
	MAT-303	Inferential Statistics	3	
Core Courses	Man-311	Business Research Methods	3	
Ino	ACT-306	Managerial Accounting	3	42
e O	ECO-304	Managerial Economics	3	42
Col	MAN-307	Human Resource Management	3	
	Law-302	Corporate Law	3	
	MAN-308	Entrepreneurship	3	
	MAN-312	Strategic Management	3	
	ITC-302	E-commerce	3	
	Man-310	Corporate Governance	3	
Course Category	Course Code	Course Title	Credit hours	Total Credits
ses		Accounting		
Elective Courses	ACT-501	Company Accounting	3	
/e C	ACT-502	International Financial Reporting Standards-I	3	
) ¢ctiv	ACT-503	International Financial Reporting Standards-II	3	
Ë	ACT-504	International Financial Reporting Standards-III	3	

Course Category	Course Code	Course Title	Credit hours	Total Credits
	ACT-505	Public Sector Accounting	3	
	ACT-506	Analysis of Financial Statements	3	
	ACT-507	Environmental Accounting	3	
	ECO-501	Econometrics	3	
	ACT-508	International Accounting	3	
		Finance		
	FIN-501	Financial Markets & institutions	3	
	FIN-502	Analysis of Financial Statements	3	
	FIN-503	Investment and portfolio Management	3	
	FIN-504	International finance	3	
	FIN-505	Islamic finance	3	
	FIN-506	Treasury and Fund Management	3	
	FIN-507	Project finance and Evaluation	3	
	ECO-501	Econometrics	3	
	FIN-509	Risk Management	3	
e Se	FIN-508	Financial Derivation	3	
Elective Courses		Audit & Taxation		
e C	AUD-501	Auditing and Assurance	3	12
ctiv	AUD-502	Forensic and Investigation Auditing	3	
Ш	AUD-503	Internal control system and compliance	3	
	AUD-504	Performance audit and Evaluation	3	
	TAX-501	Income tax law	3	
	TAX-502	Sales tax laws	3	
	TAX-503	Custom duty laws	3	
	TAX-504	Excises duty laws	3	
		Banking		
	BAN-501	Commercial Banking Operations	3	
	BAN-502	SME Banking	3	
	BAN-503	Consumer Banking	3	
	BAN-504	Islamic Finance	3	
	BAN-505	Credit and Risk Management	3	
	BAN-506	E-Banking	3	
	BAN-507	International Banking	3	
	BAN-508	Anti-Money Laundering	3	
	ECO-501	Econometrics	3	

Semester Wise Study Plan

Semester Wise Study Plan of BS (Commerce) Tentative course offering plan for BS (Commerce) degree offered for Spring 2023 is given below in a semester wise format.

	Course Code	Course Title	Pre-requisite	Credit Hours
	COM-301	Islamic & Pak Studies	None	3
-18)	ENG-301	Functional English	None	3
Semester dit Hours-	ITC-301	Introduction To Computer	None	3
1 st Sen Credit H	MAT-301	Business Math	None	3
1 st (Crec	MAN-301	Introduction To Business	None	3
	ACT-301	Financial Accounting I	None	3

Course Code		Course Title	Pre-requisite	Credit Hours
	MAN-302	Self-Management Skill	None	3
er -18)	ENG-302	Business Communication	ENG-301	3
emeste Hours-	MAN-303	Principle Of Management	MAN-301	3
S H	MAT-302	Business Statistic	None	3
2 nd (Cred	ECO-301	Micro Economic	None	3
	ACT-302	Financial Accounting II	ACT-301	3

Course Code		Course Title	Pre-requisite	Credit Hours
	COM-302	Introduction To Psychology	None	3
er -18)	ENG-303	Oral Communication	ENG-302	3
Semester lit Hours-	MAN-304	Principles of Marketing	MAN-303	3
	LAW-301	Business Law	None	3
3rd (Cree	ECO-302	Macro-Economic	ECO-301	3
	ACT-303	Advance Accounting – I	ACT-302	3

Semester Wise Study Plan

Course Code		Course Title	Pre-requisite	Credit Hours
	COM-303	Introduction To Sociology	None	3
er -18)	BAN-301	Money And Banking	None	3
emeste Hours-	FIN-301	Intro. To Business Finance	None	3
S H	AUD-301	Principles Of Auditing	ACT-301	3
4 th (Crec	ECO-303	Economy Of Pakistan	ECO-302	3
	ACT-304	Cost Accounting	ACT-301	3

Course Code		Course Title	Pre-requisite	Credit Hours
	MAN-305	Business Ethics	None	3
er 18)	MAN-306	Organizational Behavior	None	3
5 th Semester (Credit Hours-18	FIN-302	Financial Management	ACT-301	3
th Ser edit F	TEX-301	Business Taxation	FIN-301	3
U ai	MAN-307	Human Resource Mgt.	ACT-301	3
	ACT-305	Advance Accounting – II	MAN-303	3
Co	urse Code	Course Title	Pre-requisite	Credit Hours
	MAN-308	Entrepreneurship	MAN-301	3
er 18)	LAW-302	Corporate Law	LAW-301	3
6 th Semester Credit Hours-18	MAN-311	Business Research Methods	NONE	3
th Ser edit F	MAT-303	Inferential Statistics	MAT-302	3
Cre Gre	MAN-309	International Business	MAN-309	3
	ACT-306	Managerial Accounting	ACT-304	3

Semester Wise Study Plan

Course Code		irse Code	Course Title	Pre-requisite	Credit Hours
	5)	MAN-310	Corporate Governance	MAN-301	3
mester	Irs-1		Managerial Economics	MAN-303	3
eme	Hou	ITC-302	E-Commerce	ECO-301	3
7 th Sel	redit		Elective-1		3
	Ū		Elective-2		3

Cou	urse Code	Course Title	Pre-requisite	Credit Hours
er -15)	MAN-312	Strategic Management	None	3
Semester it Hours-1		Elective-3	None	3
		Elective-4	None	3
8 ^{tl} (Cre		Elective-5 (Internship/Research Project)	None	6



Diploma in Accounting and Finance

Program Name:

Diploma in Accounting and Finance

Duration:

1 Year (2 Semesters)

Eligibility Criteria: Intermediate with 45% Marks

Diploma in Accounting & Finance has been designed to cater the ever-increasing demand in the industry for accounting and finance professionals who are more conceptually equipped and academically sound to take the challenges of day to day organizational tasks. Today's finance world demands more competitive, specific, innovative and tailor-made skills for survival in a globalized business environment. The diploma will also provide a way-in to those having no prior knowledge but intend to join a higher study program.

Program Objectives

- This diploma aims to deliver the students conceptual understanding of key areas in accounting & finance backed by strong theoretical knowledge in both the disciplines.
- This program enables them to equip with analytical & critical thinking, and problem solving skills required by the contemporary business world.

First Semester - Spring (Credit Hours-17)

Course Code	Course Title	Pre-requisite	Credit Hours
ACT-301	Fiancial Accounting I	None	3
MAN-303	Principle of Management	Intro. to Business	3
ITC-301	Introduction to Computer	None	3
ENG-302	Business Communication	Functional English	3
MAN-301	Introduction to Business	None	3
FIN-301	Introduction to Business Fianance	None	3
		Total Credit Hours	18

Second Semester - Fall (Credit Hours-16)

Course Code	Course Title	Pre-requisite	Credit Hours
ACT-302	Fiancial Accounting II	Fiancial Accounting I	3
ACT-304	Cost Accounting	Fiancial Accounting I	3
BAN-301	Money and Banking	None	3
FIN-302	Financial Management	Fiancial Accounting I	3
FIN-501	Financial Market and Institution	Financial Management	3
		Total Credit Hours	15

Department of Economics

Programs:

BS Economics (4 Years)



Faculty



Ms. Shama Suleman Chairperson (Acting) MS in Economics | Institute of Business Management Karachi | PK (2022)

Faculty

- Mr. Salaiman
 M.Phil Economics (LUAWMS, Pk)
- Ms. Nazia



Admission Criteria

At least 45% marks in intermediate / I.Com / D.Com or equivalent certificate.

Fee Structure

		1
Sr. No	Detail of Charges	Amount
1	Admission Fee (One-time fee)	1,500
2	Tuition Fee	6,500
3	Security Money Refundable (Onetime fee)	2,000
4	Examination fee	250
5	Identity Card	200
6	Lab fee	2,000
7	Sports Fee	250
8	Transport Fee per semester	250
9	Library Fee	250
10	Total (First Semester Fee)	13,200
	Fee per semester from 2nd to 8th	9,200

Degree Requirement for the BS Economics

For obtaining Bachelor of Science degree in Economics, a student has to complete Minimum 138 credit hours with a CGPA of 2.0 or above.

Course requirements for obtaining BS (Economics) degree offered by Department of Economics are given below;

DIVISION OF COURSES		
1. For All Disciplines of BS (4 Years Degree Program):	Courses	Credit Hours
Compulsory Courses (with no choice):	9*	25
General Courses (diversification courses):	8	24
Common Courses For all BS Disciplines:	17	49
2. Specific Courses for BS. Economics (4 Years Degree Program):	Courses	Credit Hours
Foundation Courses :	8	24
Major Courses :	11 - 15	33 - 45
Optional Courses :	4 - 8	12 - 24
Discipline Specific Courses For BS Economics:	27	81
Total Courses for BS Economics (4 Years Degree Program):	44	130

Compulsory Courses (with no choice): 9		
1. For All Disciplines of BS (4 Years Degree Program):	Courses	Credit Hours
Compulsory Courses (with no choice):	9*	25
General Courses (diversification courses):	8	24

* In lieu of English IV and Intermediate Mathematics university has option to offer any other (non - economics) courses such as Non-English language course, Citizenship Education and Community Engagement, Entrepreneur or any other course.

** Each course worth 3 credit hours, except Islamic Studies/Ethics and Pakistan Studies. The two courses are of two credit hours each.

General Courses (Diversification): 8

International Relations	Introduction to Geography	
General Science	Introduction to Law	
Introduction to Sociology	Introduction to Mass Communication	
Principles of Political Science	Principles of Psychology	
Principles of Accounting	Introduction to Anthropology	
Introduction to Philosophy	Principles of Management	
Introduction to Logic	Introduction to Education	
Introduction to Commerce	One Non-English Language Course such as Arabic, Chinese, etc.	

University has option to offer any diversification course depending upon the availability of teacher. Moreover university can expand the list of diversification courses.

Foundation Courses: 8				
Principles of Microeconomics	Intermediate Microeconomics			
Principles of Macroeconomics	Intermediate Macroeconomics			
Statistics – I	Statistics – II			
Mathematical Economics	Econometrics			
General Courses (Diversification): 8				
--	----------------------------	--	--	--
Microeconomic Analysis	Macroeconomic Analysis			
International Economics	Financial Economics			
Development Economics	Monetary Economics			
Islamic Economics	Public Finance			
Research Methodology	Issues in Pakistan Economy			
Overview of World Economy	Dynamic Optimization***			
Time Series and Panel Data Econometrics***	Economic Growth***			
General Equilibrium & Welfare Economics***				

*** University has option to offer any other course(s) in lieu of these, from the list of approved optional courses.

Optiona	I Courses: 4 – 8
Microeconomics Game Theory Industrial Organization Behavioral Economics Experimental Economics	Macroeconomics and Public Sector Economics Monetary Policy Fiscal Policy Cost-Benefit Analysis Economics of Regulations and Competitive Economy
Labour and Population Labour Economics Population Economics Human Resource Development	Islamic Economics Islamic Banking: Theory and Practice Islamic Finance Divine Economics
International Economics and Finance Trade and Development International Finance	Resource Economics Natural Resource Economics Environmental Economics Energy Economics Economics of Climate Change
Development Studies Development Policy Poverty and Income Distribution Political Economy History of Economic Thought World Economic History Economics of Happiness and Wellbeing	Other Courses Economics of Education Urban Economics Transport Economics Health Economics Institutional Economics Real Analysis Real Estate Economics Economics of Terrorism, War and Conflict

Note: University has option to expand the list of optional courses

Semester Wise Study Plan of BS (Economics) Tentative course offering plan for BS (Economics) degree offered for Spring 2023 is given below in a semester wise format.

Semester	Subject	Credit Hours
	English - I	3
	Principles of Microeconomics	3
First Semester (Credit Hours:17)	Islamic Studies / Ethics	2
	Basic Mathematics	3
	Diversification - I	3
	Diversification - II	3
	English - II	3
Second Semester	Pakistan Studies	2
(Credit Hours:17)	Principles of Macroeconomics	3
,	Statistics - I	3
	Diversification - 3	3
	Diversification - 4	3
	En aliah III	2
	English - III	3
Third Semester	Intermediate Microeconomics	3
(Credit Hours:18)	Introduction to Computer	3
	Intermediate Mathematics *	3
	Diversification - 5 Diversification - 6	3
	Diversification - 6	3
	English - IV*	3
	Intermediate Macroeconomics	3
Fourth Semester	Statistics - II	3
(Credit Hours:18)	Issues in World Economy	3
. ,	Diversification - 7	3
	Diversification - 8	3
	Microeconomic Analysis	3
Fifth Semester	Monetary Economics	3
(Credit Hours:15	Public Finance	3
	Mathematical Economics	3
	Econometrics	3

Semester	Subject	Credit Hours		
	Macroeconomic Analysis	3		
Sixth Semester	International Economics	3		
(Credit Hours:15)	Development Economics	3		
	Financial Economics	3		
	Research Methodology	3		
	Time Series and Panel Data Econometrics**	3		
	Dynamic Optimization**	2		
Seventh Semester (Credit Hours:15)	Islamic Economics	3		
	Optional - 1***	3		
	Optional - 2	3		
	General Equilibrium & Welfare Economics **	3		
Eighth Semester	Economic Growth**	3		
(Credit Hours:15)	Issues in Pakistan Economy	3		
	Optional - 3***	3		
	Optional - 4	3		
Total Credit Hours: 130				



Department of Education

Programs:

- B.Ed (Hons 4 Years)
- B.Ed (2.5 Years)
- B.Ed (1.5 Years)

Faculty



Ms. Shah Naz Noor Chairperson (Acting) Ph.D in Education (iqra University Karachi, PK) In-Progress

Faculty

- Dr. Rabia Aslam
 PhD ELM | Shaheed Zulfigar Ali Bhutto Institute of Science and Technology Karachi | PK (2022)
- Mr. Mukhtar Bashir
 - M.Phil in Education (Iqra University Karachi, PK)
- Ms. Sadia Naseer
 M.Phil in Education (AKUED Karachi, PK)
- Ms. Dur Jan
 M.Phil (Iqra University Karachi, PK)

Teaching Fellows

- Farah Faisal
 - M.Phil Education | Benazir Bhutto Shaheed University Liyari Karachi | PK (2024)
- Imran Ishaque
 - B.Ed (Hons) | University of Turbat | PK (2020)
- Aneela Ali
 - MS. Education | Sindh Madressatull Islam University Karachi | PK (2024)
- Sara Nayak Ali
 - M.Phil Education | Sardar Bahadur Khan Women's University Quetta | PK (2020)
- Sanober Baloch
 - MS Education | Sindh Madarasatul Islam Karachi | PK (2024)
- Sal Jan
 - M.Phil Education | Iqra University Karachi | PK (2025)
- Ms. Banul
 - B.Ed (University of Turbat, PK)

Degree Requirement for the B.Ed (Hons)

For obtaining Bachelor of Education (Hons) degree, a student has to complete Minimum 135 credit hours with a CGPA of 2.0 or above.

Course requirements for obtaining B.Ed (Hons) degree offered by Department of Education are given below;

Course Category	Course Code	Course Title	Credit hours	Total Credits
	ENG-101	Functional English-I	3	
ses	IS-103	Islamic Studies/ Ethics	2	
Compulsory Courses	ENG-102	English-II (Communication Skills)	3	
ory (CL-104	Computer Literacy	3	19
sInd	GM-108	General Mathematics	3	
Lon	PS-110	Pakistan Studies	2	
	ENG-301	English – III (Technical Writing & Presentation Skills)	3	
Course Category	Course Code	Course Title	Credit hours	Total Credits
	MTIS-112	Methods of Teaching Islamic Studies	3	
	TLS-201	Teaching Literacy Skills	3	
	TURL-205	Teaching of Urdu/ Regional Languages	3	
	TGS-207	Teaching of General Science	3	
ŷ	ICT-209	Instructional and Communication Technology in Education	2	
Courses	TENG-204	Teaching of English	3	
	TM-206	Teaching of Mathematics	3	
onal	TSS-210	Teaching of Social Studies	2	43
Professio	CITE-302	Contemporary Issues and Trends in Education	3	
Pro	CEDU-308	Comparative Education	3	
	IGC-310	Introduction to Guidance and Counseling	3	
	SM-402	School Management	3	
	RME-409	Research Methods in Education	3	
	TDE-404	Test Development and Evaluation	3	
	RP-408	Research Project	3	

42

Course Category	Course Code	Course Title	Credit hours	Total Credits
	CD-105	Child Development	3	
	GMT-111	General Methods of Teaching	3	
	CM-106	Classroom Management	3	
,ses	CA-202	Classroom Assessment	3	
Foundation Courses	SCT-208	School, community and Teacher	3	
tion	FEDU-303	Foundations of Education	3	33
Indat	CRD-309	Curriculum Development	3	
Fou	EDUP-311	Educational Psychology	3	
	PEDA-405	Pedagogy – I (Specialization – I)	3	
	PEDA-407	Pedagogy – II (Specialization – II)	3	
	URD-107	Urdu / Regional Languages	3	
Course Category	Course Code	Course Title	Credit hours	Total Credits
	GS-109	General Science	3	
	100 000			
	ACC-203	Art, Crafts and Calligraphy	3	
rses	ACC-203 CC-305	Art, Crafts and Calligraphy Content Course – I (Discipline – I)	3 3	
Courses				24
	CC-305	Content Course – I (Discipline – I)	3	24
Content Courses	CC-305 CC-307	Content Course – I (Discipline – I) Content Course – I (Discipline – II)	3 3	24
	CC-305 CC-307 CC-304	Content Course – I (Discipline – I) Content Course – I (Discipline – II) Content Course – II (Discipline – I)	3 3 3	24
	CC-305 CC-307 CC-304 CC-306	Content Course – I (Discipline – I) Content Course – I (Discipline – II) Content Course – II (Discipline – I) Content Course – II (Discipline – II)	3 3 3 3	24
	CC-305 CC-307 CC-304 CC-306 CC-401	Content Course – I (Discipline – I) Content Course – I (Discipline – II) Content Course – II (Discipline – I) Content Course – II (Discipline – II) Content Course – III (Discipline – I)	3 3 3 3 3 3	24 Total Credits
Course	CC-305 CC-307 CC-304 CC-306 CC-401 CC-403 CC-403	Content Course – I (Discipline – I) Content Course – I (Discipline – II) Content Course – II (Discipline – I) Content Course – II (Discipline – II) Content Course – III (Discipline – I) Content Course – III (Discipline – I)	3 3 3 3 3 3 3	Total
Course Category	CC-305 CC-307 CC-304 CC-306 CC-401 CC-403 CC-403	Content Course - I (Discipline - I) Content Course - I (Discipline - II) Content Course - II (Discipline - I) Content Course - II (Discipline - II) Content Course - III (Discipline - I) Content Course - III (Discipline - II) Content Course - III (Discipline - II)	3 3 3 3 3 3 3 Credit hours	Total Credits
Course	CC-305 CC-307 CC-304 CC-306 CC-401 CC-403 CC-403 CC-403 TP-211	Content Course - I (Discipline - I) Content Course - I (Discipline - II) Content Course - II (Discipline - I) Content Course - II (Discipline - II) Content Course - III (Discipline - I) Content Course - III (Discipline - II) Teaching Practice - I (Short Term)	3 3 3 3 3 3 3 Credit hours	Total

Semester Wise Study Plan of B.Ed (Hons)

Tentative course offering plan for B.Ed (Hons) degree offered for Spring 2022 is given below in a semester wise format.

Cou	irse Code	Course Title	Pre- requisite	Credit Hours
1 5-	ENG-101	Functional English-I	None	3
	IS-103	Islamic Studies/Ethics	None	2
Semester dit Hours-	CD-105 Child Development	Child Development	None	3
	URD-107	Urdu/Regional languages	None	3
1 st (Cree	GS-109	General Science	None	3
	GMT-111	General Methods of Teaching	None	3

Cou	urse Code	Course Title	Pre-requisite	Credit Hours
	ENG-102	English-II (Communication Skills)	None	3
er -17)	CL-104	Computer Literacy	None	2
emeste Hours-	CM-106	CM-106 Class Room Management	None	3
dit S	GM-108	General Mathematics	None	3
2 nd (Cred	PS-110	Pakistan Studies	None	2
	MTIS-112	Methods of Teaching Islamic Studies	None	3

Co	urse Code	Course Title	Pre- requisite	Credit Hours
	TLS-201	Teaching Literacy Skills	None	3
-17)	ACC-203	Art, Crafts and Calligraphy	None	2
Semester lit Hours-	TURL-205	TURL-205 Teaching of Urdu/Regional languages	None	3
	TGS-207	Teaching of General Science	None	3
3 rd (Crec	ICT-209	Instructional and Communication Technology in Education	None	2
	TP-211	Teaching Practice (Short Term)	None	3

C	ourse Code	Course Title	Pre-requisite	Credit Hours
4 th Semester Credit Hours-17)	CA-202	Class Room Assessment	None	3
	TENG-204	Teaching of English	None	3
	TM-206	Teaching of Mathematics	None	3
	SCT-208	School, Community & Teacher	None	3
4 th (Cred	TSS-210	Teaching of Social Studies	None	2
	TP-212	Teaching Practice	None	3

C	ourse Code	Course Title	Pre-requisite	Credit Hours
	ENG-301	English-III (Technical Writing & Presentation Skills)	None	3
er 8-18)	CC-305 Contented Course-I (Discipline-I) None	Foundation of Education	None	3
nest(Hours		None	3	
5 th Sel Credit I		None	3	
Cr 5	CRD-309	Curriculum Development	None	3
	EDUP-311	Educational Psychology	None	3

C	ourse Code	Course Title	Pre-requisite	Credit Hours
5)	CITE-302	Contemporary issues & Trends in Education	None	3
	CC-304	Content Course-II (Discipline-I)	None	3
semester it Hours-	CC-306	Content Course-II (Discipline-II)	None	3
6 th S Credit	CEDU-308	Comparative Education	None	3
	IGC-310	Introduction to Guidance and Counselling	None	3

Cou	rse Code	Course Title	Pre-requisite	Credit Hours
	CC-401	Content Course-III (Discipline-I)	None	3
r 18)	CC-403	Content Course-III (Discipline-II)	None	3
Semester lit Hours-	PEDA-405	Pedagogy-I (Specialization-I)	None	3
^h Seme dit Ho	PEDA-407	Pedagogy-II (Specialization-II)	None	3
7 th Cred	RME-409	Research Methods in Education	None	3
Ŭ	TP-411	Teaching Practice (Short Term)	None	3

Cours	se Code	Course Title	Pre-requisite	Credit Hours
edit	SM-402	School Management	None	3
er (Cr -15)	TDE-404	Test Development and Evaluation	None	3
Semester Hours-1	TP-406	Teaching Practice (Long Term)	None	6
8 th Sel F	RP-408	Research Project	None	3



Department of English

Programs:

BS English (4 Years)





Mr. Muhammad Farooq Chairperson (Acting) M.S in English Language and Literature IIUI Islamabad

Fac

Faculty

Mr. Mubarak Ali Lecturer M.S English (LUAWMS, Pk)

Mr. Awais Teaching Fellow B.S English, University of Sindh

Ms. Sabah Basheer Teaching Fellow M.Phil English, Iqra University Krachi

Degree Requirement for the BS English

For obtaining Bachelor of Science English degree, a student has to complete Minimum 136 credit hours with a CGPA of 2.0 or above.

Course requirements for obtaining BS English degree offered by Department of English are given below;

Course Category	Course Title	Credit hours	Total Credits
	Study Skills	3	
	Paistan Studies	2	
S	Islamic Studeies	2	
ourse	Human Rights & Citizenship	3	
Compulsory Courses	Introduction to environmental studies	3	28
nlsoi	English -I Reading and Writing Skills	3	20
dwo	English-II Composition Writing	3	
Ŭ	Introuction to Information & Computer Technology (ICT)	2+1	
	English-III Communication and Presentation Skills	3	
	English -IV Academic Reading & Writing	3	
Course Category	Course Title	Credit hours	Total Credits
	Introduction to Geography	3	
	Introduction to International Relations	3	
	Islamic History & Culture	3	
ses	Global Poetry	3	
Courses	Introduction to Philosophy	3	
_	Mass Communication	3	
ecti	Psychology	3	18
ity E	Sociology	3	
University Elective	Political Science	3	
C	Education History	3	
	Social Work	3	
	Human Rights	3	
	Gender Studies	3	

Course Category	Course Title	Credit hours	Total Credits
<u>ve</u>	Anthropology	3	
University Elective Courses	Entrepreneurship	3	
rsity Ele Courses	Intoduction to Statistics	3	
iver, C	Health & Physical Education	3	
Ŋ	Elementary Mathematics & Stats	3	
Course Category	Course Title	Credit hours	Total Credits
ç	Introduction Literary Studies	3	
Foundation Courses	Introduction to Language Studies	3	12
ounc	Introduction to Phonetics & Phonology	3	IZ
ш	Literary Forms and Movements	3	
Course Category	Course Title	Credit hours	Total Credits
	Short Fictional Narratives	3	
	Introduction to Morphology	3	
	Classical and Renaissance Drama	3	
	Classical Poetry	3	
	Semantics	3	
Ś	Rise of the Novel (18th to 19th Century)	3	
Major Courses	Romantics and Victorian Poetry	3	
L Co	Foundations of Literary Theory & Criticism	3	66
Мајо	Sociolinguistics	3	
-	Popular Fiction	3	
	Modern Poetry	3	
	Modern Drama	3	
	Modern Novel	3	
	Grammar & Syntax	3	
	Discourse Studies	3	

Course Category	Course Title	Credit hours	Total Credits
	Creative Nonfiction	3	
S	Research Method and Term Paper Writing	3	
urse	Introduction to Applied Linguistics	3	
O S	Literary Theory and Practice	3	
Major Courses	Introduction to Translation Studies	3	
2	Introduction to Women's Writing	3	
	World Englishes	3	
Course Category	Course Title	Credit hours	Total Credits
	Introduction to Stylistics	3	
	Pakistani Literature in English	3	
	Postcolonial Literature	3	
	American Literature	3	
	African Literature	3	
	Postcolonial women's Writing	3	
	Postmodern Fiction	3	
(0	Islam and Western Literature	3	
Irses	Pakistani Folk Literature	3	
Col	Emerging Trends in Sociolinguistics	3	12
Elective Cou	ESP	3	12
Elec	Introduction to Critical Pedagogy	3	
	Pakistani English	3	
	Second Language acquisition	3	
	Introduction to Syntax	3	
	Introduction to Forensic Linguistics	3	
	Clinical Linguistics	3	
	Language and education	3	
	Language and gender	3	
	Corpus Linguistics	3	

FIRST SEMESTER

Course Code	Course Title	Course Type	Credit Hours
GC101	Study Skills	Compulsory General	3
GC102	Introduction to Geography	General	3
GC103	Pakistan Studies	Compulsory	2
ELL101	English I: Reading and Writing Skills	Foundational	3
ELL102	Introduction to Literary Studies	Subject-specific Foundational	3
ELL103	Introduction to Language Studies	Subject-specific Foundational	3
Total			17

SECOND SEMESTER

Course Code	Course Title	Course Type	Credit Hours
GC104	Islamic Studies	Compulsory	2
GC105	Elementary Mathematics & Stats	General	3
GC106	Introduction to Philosophy	General	3
ELL104	English II: Composition Writing	Foundational	3
ELL105	Introduction to Phonetics & Phonology	Subject-specific Foundational	3
ELL106	Literary Forms and Movements	Subject-specific Foundational	3
Total			17

THIRD SEMESTER

Course Code	Course Title	Course Type	Credit Hours
GC201	Introduction to Information & Computer Technology Skill	Foundational	2+1
GC202	Islamic History & Culture	General	3
GC203	Global Poetry	General	3
ELL201	English III: Communication and Presentation Skills	Foundational	3
ELL202	Short Fictional Narratives	Subject-specific Foundational	3
ELL203	Introduction to Morphology	Subject-specific Foundational	3
Total			18

FOURTH SEMESTER

Course Code	Course Title	Course Type	Credit Hours
GC204	Human Rights & Citizenship	Compulsory General	3
ELL204	English IV: Academic Reading & Writing	Foundational	3
ELL205	Classical and Renaissance Drama	Subject-specific Foundational	3
ELL206	Classical Poetry	Subject-specific Foundational	3
ELL207	Semantics	Subject-specific Foundational	3
ELL208	Rise of the Novel (18 th to 19 th century)	Subject-specific Foundational	3
Total			18

FIFTH SEMESTER

Course Code	Course Title	Course Type	Credit Hours
GC301	Introduction to International Relations	General	3
GC302	Introduction to Environmental Studies	Compulsory General	3
ELL301	Romantic and Victorian Poetry	Subject-specific Foundational	3
ELL302	Foundations of Literary Theory & Criticism	Subject-specific Foundational	3
ELL303	Sociolinguistics	Subject-specific Foundational	3
ELL304	Popular Fiction	Subject-specific Foundational	3
Total			18

SIXTH SEMESTER

Course Code	Course Title	Course Type	Credit Hours
ELL305	Modern Poetry	Subject-specific	2+1
ELL306	Modern Drama	Subject-specific	3
ELL307	Modern Novel	Subject-specific	3
ELL308	Grammar & Syntax	Subject-specific	3
ELL309	Discourse Studies	Subject-specific	3
ELL310	Creative Nonfiction	Subject-specific	3
Total			18

SEVENTH SEMESTER

Course Code	Course Title	Course Type	Credit Hours
ELL401	Research Methods and Term Paper Writing	Subject-specific	3
ELL402	Introduction to Applied Linguistics	Subject-specific	3
ELL403	Introduction to Stylistics	Subject-specific	2
ELL404	Literary Theory and Practice	Subject-specific	3
ELL405	Pakistani Literature in English	Subject-specific	3
Total			15

EIGHTH SEMESTER

Course Code	Course Title	Course Type	Credit Hours
ELL406	Postcolonial Literature	Subject-specific	3
ELL407	American Literature	Subject-specific	3
ELL408	Introduction to Translation Studies	Subject-specific	2
ELL409	Introduction to Women's Writing	Subject-specific	3
ELL410	World Englishes	Subject-specific	3
Total			15

The given courses in the seventh and eighth semesters may be replaced with courses from the list of electives given, provided the required expertise is available in the department. However, the ratio of the literature and linguistics courses should remain the same as the aim of undergrad degree is to impart general education in humanities.
 The choice of general courses may also be determined by the availability of expertise in the institution.



Department of Management Sciences

Programs:

- Bachelor of Business Administration (BBA 4 Years)
- Diploma in Hotel Management (1 Year)
- Diploma in Maritime & Port Management (1 Year)

ethic plan growth inspiration product service innovation focus solution organization customer teamwo people finance investment development quality partner Busines process management research nding project leadership goal strategy effic marketing ncy production success mission creativit performance accounting achievement network revenue reliability cost communication technology vision idea

Faculty



Mr. Fida Hussain

Chairperson (Acting) BS Management Science (UoT Turbat, PK) MBA (Bahria University Karachi, PK)

Faculty

- Dr. Kambar Farooq
 PhD Management Science | China
- Dr. Irshad Ahmed
 Ph.D in Management Science (IoBM Karachi, PK)
- Mr. Saghir Naseem
 MS in Management Science (ZBIST Karachi, PK)
- Mr. Ubaid Ali
 - MS in Management Sceince (MAJU Karachi, PK) In-Progress
- Dilawar Khan

MBA – SUPPLY CHAIN SZABIST ISAMABAD | GOLD MEDALIST | PK (2018)

Teaching Fellows

Ganjkhatoon

MS Marketing | Benazir Bhutto Shaheed University Lyari Karachi | PK (2020)

- Aqsa Ahmed
 - MBA Human Resource Management | Bahria University Karachi | PK (2023)
- Noureen Umer

M.Phil Management Science | Al Hamd Islamic University Quetta | PK (2022)

Introduction

The department of Management Sciences was established with the inception of the University of Turbat, Gwadar Campus. The academic activities were started from 16th January, 2017 with four year BBA program.

The department offers specialization in Finance, Human Resource Management, and Marketing with its specialist and gualified faculty members who have completed their education from top universities of Pakistan and foreign countries. The department of management sciences not only relies on academic activities but also guides and assists the student in organizing different events and workshops like business gala and taking participation in entrepreneurship challenges for gaining practical experience of doing their own business before completing their studies. The students are also sent to different organizations, banks for completing their internship. The main objective of this department is to produce entrepreneurs, skilled human resources in the field of Management, Marketing, Finance, Human Resource Management who could work for the betterment of the society, where they live and to prepare themselves to meet the future opportunities and challenges like CPEC.

Department Mission

The mission of the Department of Management Science is to provide an environment for creating innovative and excellence human resource by developing their entrepreneurial skills with the adaptation of the latest technological methodology of teaching, learning and research.

Objective of the department

- The department of management sciences focuses on producing skilled human resources in the field of management sciences in order to prepare them for the future opportunities and make them suitable for market needs.
- To provide high quality academic support to strengthen the management science and related business areas in the region.
- To give a brief career counselling to the students and show them the right path toward best future.
- Establishing an incubation centre for young entrepreneurs with the collaboration and support from fund raising agencies.

Bachelor of Business Administration

BBA program is comprised of eight semesters. Students take a total of 45 courses during the degree, in addition to a six-week internship. There are 40 core courses and four specialised courses among the offered courses. The student's academic progress for each course is assessed through two exams of 2 hours in the semester and a 3 hours comprehensive exam at the end of the semester.

Program Learning Outcomes (PLO's)

- Understanding of Basic Finance, Banking, Financial problems, and their solution and Management Concepts.
- Improving the Analytical, theoretical and communication Skills of Students to evaluate the Business Situation and Financial Health of a Firm.
- Increase depth and breadth of understanding in the chosen area of specialization in Finance and HRM.
- Enable students to rise to the challenges and find opportunities in the given area of specialization.
- Demonstrate and improve effective written & oral communication skills.
- Be able to effectively promote organization's products and services to the final consumers.
- Be able to deal with contemporary issues in the different working environments.
- Be able to keep abreast with the latest information technology used in various industries.
- To work with a collaborative and creative approach in task-oriented goals.
- To develop their creative, innovative, and management skills.
- To produce skilled graduates having knowledge of business.
- To develop creative, innovative and management skills in students and prepare them for future opportunities and challenges.
- To arouse exploration in the mind of the students, to know trends and issues of business as a manager.
- To keep students aware about business norms, ethical and social values.
- Developing entrepreneurial skills in students.
- To equip the students with problem solving skills by identifying and solving business issues.
- Preparation of the students for either advanced studies in the field of business, management or other related programs or career in industry.

University of Gwadar

Admission Criteria

Students with F.A/F.Sc or Equivalent degree with at least 45% marks is eligible to apply.

Fee Structure

Sr. No	Detail of Charges	Amount
1	Admission Fee (One-time fee)	2000
2	Tuition Fee	7,500
3	Security Money (Refundable (Onetime fee)	2,000
4	Examination fee	250
5	Identity Card	200
6	Lab fee	500
7	Sports Fee	250
8	Transport Fee	250
9	Library Fee	250
10	Total (First Semester Fee)	13, 200
	Fee per semester from 2 nd to 8 th	9,200

Degree Requirement for the Business Administration

For obtaining Bachelor of Business Administration, a student has to complete Minimum 135 credit hours with a CGPA of 2.0 or above.

Course requirements for obtaining BBA degree offered by Department of Management Sciences are given below;

Course Category	Course Code	Course Title	Credit hours	Total Credits
Compulsory Courses	ENG-301	Functional English	3	
	BC-301	Business Communication (written)	3	
	BS-302	Business Communication (oral)	3	
	PIS-301	Pakistan & Islamic Studies	3	21
Indu	MAT-301	Business Mathematics	3	
Cor	ECO-401	Macro Economics	3	
	BS-302	Business Statistics	3	
eral 'ses	SOC-302	Introduction to Sociology	3	C
General Courses	CSRB-401	Corporate Social Responsibility and Business Ethics	3	6

Course Category	Course Code	Course Title	Credit hours	Total Credits
	ITB-301	Introduction to business	3	
	ACT-301	Introduction to Accounting	3	
	MKT-301	Principles of Marketing	3	
Foundation Courses	BSF-301	Business Finance	3	
	MGT-301	Principles of Management	3	
	ICT-301	Introduction to Computer	3	33
nda	HRM-302	Human Resource Management	3	
Fou	LAW-301	Business & Corporate Law	3	
	BRM-501	Business Research Methods	3	
	ECO-301	Micro Economics	3	
	MGT-303	Self-Management Skills	3	
	ACC-302	Financial Accounting	3	
	FIN-401	Financial Management	3	
	MKT-401	Marketing management	3	
	MGT-502	Production & Operations Management	3	
	MIS-401	Management Information System	3	
	ECO-403	Economies of Developing Countries	3	
Irses	MGT-401	Total Quality Management	3	
Core Courses	IB-402	International Business	3	63
Core	MGT-605	Strategic Management	3	
	ENT-501	Entrepreneurship	3	
	MKT-501	Consumer Behavior	3	
	ORB-301	Organizational Behavior	3	
	BAN-301	Money & Banking	3	
	BIN-501	Islamic Banking & Finance	3	
	ACT-401	Cost Accounting	3	

University of Gwadar

Requirements

Course Category	Course Code	Course Title	Credit hours	Total Credits
	ACT-502	Auditing & Taxations	3	
S	MIS-402	Electronic Commerce	3	
ourse	ACT-501	Managerial Accounting	3	63
Core Courses	STI-401	Statistical Inferential	3	03
ŏ	FIN-501	Financial Markets & Institutions	3	
	BRM-601	Research Project/Internship	3	
		Marketing		
	MKT-601	Supply chain management	3	
	MKT-602	Advertising and Promotional strategies	3	
	MKT-603	Brand Management	3	
	MKT-604	Sales Management	3	
	MKT-605	International Marketing	3	
		Fianance		
S	FIN-601	International Financial Management	3	
ive Courses	FIN-602	Investment & Portfolio Management	3	
ve Cc	FIN-603	Financial Statement Analysis	3	12
Electi	FIN-604	Treasury & Fund Management	3	
	FIN-605	Project financing & Evaluation	3	
		Human Resource Management		
	HRM-601	Training & Development	3	
	HRM-602	Change Management	3	
	HRM-603	Industrial Relation and Labor Law	3	
	HRM-604	Conflict management	3	
	HRM-605	Organizational Development	3	
	HRM-606	Performance Management System	3	

Semester Wise Study Plan of BBA

Tentative course offering plan for BBA degree offered for Spring 2022 is given below in a semester wise format.

Course Code		Course Title	Pre-requisite	Credit Hours
	ENG-301	Functional English	None	3
-18)	ICT-301	Introduction to Computer	None	3
mester Hours-	MAT-301	Business Mathematics	None	3
1 st Sen (Credit F	ACT-301	Introduction to Accounting	None	3
<u>ر</u> ک	ITB-301	Introduction to Business	None	3
	MGT-301	Principle of Management	None	3

C	Course Code	Course Title	Pre-requisite	Credit Hours
	PIS-S301	Pak & Islamic Studies	None	3
ير -18)	ACC-302	Financial Accounting	ACT-301	3
neste Iours-	MGT-303	Self-Management Skills	None	3
2 nd Semester (Cradit Hours-18)	ECO-301	Microeconomics	None	3
2 2	BC-301	Business Communication (Written)	None	3
	BS-302	Business Statistics	None	3
Course Code				
C	Course Code	Course Title	Pre-requisite	Credit Hours
C	Course Code ECO-401	Course Title Macroeconomics	Pre-requisite ECO-301	Credit Hours
	ECO-401	Macroeconomics	ECO-301	3
	ECO-401 BS-302	Macroeconomics Business Communication (Oral)	ECO-301 None	3 3
3 rd Semester (Credit Hours-18)	ECO-401 BS-302 SOC-302	Macroeconomics Business Communication (Oral) Introduction to Sociology	ECO-301 None None	3 3 3

Coι	urse Code	Course Title	Pre-requisite	Credit Hours
	ACT-401	Cost Accounting	ACT-301	3
r 18)	BAN-301	Money and Banking	None	3
4 th Semester (Credit Hours-18)	LAW-301	Business & Corporate Law	None	3
t th Ser edit H	FIN-401	Financial Management	BSF-301	3
C 4	MKT-401	Marketing Management	MKT-301	3
	ORB-301	Organizational Behavior	None	3

Co	ourse Code	Course Title	Pre-requisite	Credit Hours
	BRM-501	Business Research Methods	None	3
r 18)	HRM-302	Human Resource	MGT-301	3
Semester lit Hours-1	ACT-501	Managerial Accounting	ACT-401	3
5 th Ser (Credit F	ECO-403	Economies of Developing Countries	ECO-401	3
Ľ Ú	CSRB-401	Corporate Social	None	3
	MIS-401	Management Information System	ICT-301	3

Со	urse Code	Course Title	Pre-requisite	Credit Hours
	MGT-401	Total Quality Management	None	3
ster rs-15)	ACT-502	Auditing and Taxation	None	3
Semester lit Hours-'	FIN-501	Financial Markets and Institutions	FIN-401	3
6 th Se (Credit	MKT-501	Consumer Behavior	MKT-301	3
	IB-402	International Business	None	3

Co	urse Code	Course Title	Pre-requisite	Credit Hours
5)	MIS-402	Electronic Commerce	None	3
	ENT-501	Entrepreneurship	None	3
Semester lit Hours-	MGT-502	Production and Operation Management	None	3
ted 7≇		Elective I		3
Ū		Elective II		3

Course Code		Course Title	Pre-requisite	Credit Hours
5)	MGT-605	Strategic Management	None	3
	BIN-501	Islamic Banking and Finance	None	3
8 th Semester redit Hours-1	BRM-601	Research Project/ Internship	None	3
8 th Se redit		Elective III		3
<u> </u>		Elective IV		3



Faculty of Sciences, Engineering & Technology



Faculty of Sciences, Engineering & Technology Dean



Dr. Mohib Ullah

Dean (Acting)

Deparments:

- Computer Science
- Chemistry

Dean's Message

Innovate, Engineer, and Lead: Shaping the Future at the University of Gwadar

At the Faculty of Science, Engineering, and Technology (FSET) at the University of Gwadar, we believe in the power of ideas, the courage to challenge the unknown, and the relentless pursuit of excellence. Science and engineering are not just fields of study; they are mindsets, tools for discovery, and vehicles for transforming the world. Standing at the intersection of land and sea in a region of immense potential, we are driven by the spirit of innovation and problem-solving. The future belongs to those who ask bold questions, see failure as an opportunity to learn, and push the limits of what is possible. We encourage our students and researchers to build, experiment, and create, knowing that true breakthroughs come from fearless exploration.

Science and technology are most impactful when applied to real-world challenges, whether in sustainable energy, marine and coastal resilience, or pioneering materials for water purification. Our mission is to advance knowledge and develop solutions that shape industries, empower communities, and improve lives. In an era of rapid change, collaboration and interdisciplinary thinking are essential, and we must work together to develop innovative solutions that bridge disciplines and push humanity forward. Gwadar is not just a city; it is a gateway to global progress, and we have the potential to make it a hub of scientific and technological advancement. The world is watching, and we must rise to the challenge and redefine what is possible. Let's build the future together.

Department of Chemistry

Programs:

BS Chemistry (4 Years)



Dr. Mohib Ullah Chairperson (Acting) PhD Physical Chemistry | Qaid e Azam University Islamabad

Faculty

Dr. Abdullah

Assistant Professor (IPFP Fellow) PhD Analytical Chemistry | NCEAC | University of Sindh Jamshoro | PK (2022)

Mr. Waseem Hameed

Lecturer M.Phil Chemistry | Quaid-i-Azam University Islamabad | PK (2020)

Ms. Sangeen Waleed

Lecturer M.S.Chemistry | University of Turbat | PK (2022)



Fee Structure of BS Chemistry

Sr. No	Detail of Charges	Amount
1	Admission Fee (One-time fee)	2,000
2	Tuition Fee	9,000
3	Security Money Refundable (Onetime fee)	2,000
4	Examination fee	250
5	Identity Card	200
6	Lab fee	2,000
7	Sports Fee	250
8	Transport Fee per semester	250
9	Library Fee	250
10	Total (First Semester Fee)	16,200
11	Fee per semester from 2 nd to 8 th	12,200

Degree Requirement for BS Chemistry

For obtaining Bachelor of Science in Chemistry degree, a student has to complete Minimum 131 credit hours with a CGPA of 2.0 or above.

Course requirements for obtaining BS (Chemistry) degree offered by Department of Chemistry are given below;

Compulsory Requirements (The Student Has No Choice)	General Courses to Be Chosen from Other Dept.			
9 Courses		7-8 Courses		
25 Credit hours		21- 24 Credit hours		
Subject	Cr. hr	Subject	Cr. hr	
ENGLISH I	3	GEN-100	3	
ENGLISH II	3	GEN-101	3	
ENGLISH III	3	GEN-201	3	
ENGLISH IV/ UNIVERSITY OPTIONAL *	3	GEN-301	3	
PAKISTAN STUDIES	2	GEN-302	3	
ISLAMIC STUDIES / ETHICS	2	GEN-400	3	
MATHEMATICS-I	3	GEN-401	3	
MATHEMATICS-II / UNIVERSITY OPTIONAL**	3			
INTRODUCTION TO COMPUTER	3			
TOTAL	25	TOTAL	21	

Course Category	Course Code	Course Title	Credit hours	Total Credits
Discipline specific foundation courses	CHEM-151	Inorganic Chemistry	3+1	23
	CHEM-161	Organic Chemistry	3+1	
	STAT-100	Statistics	3	
	CHEM-111	Analytical Chemistry	2	
	CHEM-131	Biochemistry	2	
	CHEM-121	Industrial Chemistry	2	
	CHEM-171	Physical Chemistry	3+1	
	CHEM-141	Environmental Chemistry	2	
٩	CHEM-251	Inorganic Chemistry	3+1	
	CHEM-261	Organic Chemistry	3+1	
inshi	CHEM-271	Physical Chemistry	3+1	
nter	CHEM-211/231	Analytical-/ Bio- Chemistry	3+1	52
ect/i	CHEM-351	Inorganic Chemistry	3+1	
oroje	CHEM-361	Organic Chemistry	3+1	
including research project/internship	CHEM-371	Physical Chemistry	3+1	
esea	CHEM-311/331	Analytical-/ Bio- Chemistry	3+1	
ug re		CHEM-PAPER-I	3	
Indii		CHEM- PAPER-II	3	
sinc		CHEM- PAPER-III	3	
Irse		PRACTICALI	1	
COL		CHEM-PAPER-IV	3	
Major courses		CHEM-PAPER-V	3	
2		CHEM-PEPER-VI	3	
		PRACTICAL-II	1	
		ELECTIVE COURSE – I	3	
r		ELECTIVE COURSE – II	3	
Elective courses within the major		RESEARCH PROJECT / ADVANCED PRACTICAL-I/ POSITION PAPER	2	
		RESEARCH PROJECT / ADVANCED PRACTICAL-I/ POSITION PAPER	2	

University of Gwadar

Course Title		Credit hours		
Semester -	l	Theory	Practical	
ENG-100	English-I (Functional)	3	0	
GEN-100	General-I	3	0	
GEN-101	General-II	3	0	
MATH-100	Mathematics-I / Functional Biology	3	0	
COMP-100	Computer and Its Applications in Chemistry	3	0	
CHEM-151	Inorganic Chemistry	3	1	
Total		18	1	
Course Title		Credit	Credit hours	
Semester -	II	Theory	Practical	
ENG-200	English-II (Functional)	3	0	
GEN-200	Islamic Studies / Ethics	2	0	
GEN-201	General-III	3	0	
MATH-200	Mathematics-II/ Functional Biology/University Optional	3	0	
STAT-100	Statistics	3	0	
CHEM-161	Organic Chemistry	3	1	
Total		17	1	
Course Title		Credit	hours	
Semester -	III	Theory	Practical	
ENG-300	English-III (Report Writing)	3	0	
GEN-300	Pakistan Studies	2	0	
GEN-301	General-IV	3	0	
GEN-302	General-V	3	0	
CHEM-141	Environmental Chemistry	1	0	
CHEM-171	Physical Chemistry	3	1	
Total		16	1	
		Credit	hours	
Course Title				
	IV	Theory	Practica	
Semester -	IV English-IV / University Optional	Theory 3	Practica 0	
Semester - ENG-400				
Semester - ENG-400 GEN-400	English-IV / University Optional	3	0	
Semester - ENG-400 GEN-400 GEN-401	English-IV / University Optional General-VI	3	0 0	
Course Title Semester - ENG-400 GEN-400 GEN-401 CHEM-111 CHEM-121	English-IV / University Optional General-VI General-VII	3 3 3	0 0 0	
Semester - ENG-400 GEN-400 GEN-401 CHEM-111	English-IV / University Optional General-VI General-VII Analytical Chemistry	3 3 3 2	0 0 0	

Course Title	Credit hours	
Semester - V	Theory	Practical
CHEM-251 Inorganic Chemistry	3	1
CHEM-261 Organic Chemistry	3	1
CHEM-271 Physical Chemistry	3	1
CHEM-211 Analytical-/ CHEM-231 Bio-Chemistry	3	1
Total	12	4
Course Title	Credit hours	
Semester - VI	Theory	Practical
CHEM-351 Inorganic Chemistry	3	1
CHEM-361 Organic Chemistry	3	1
CHEM-371 Physical Chemistry	3	1
CHEM-311 Analytical-/ CHEM-331 Bio- Chemistry		1
Total	12	4
Course Title	Credi	t hours
Semester - VII Specialization (Inorganic/Organic/Physical/Applied/ Analytical/Bio Chemistry)	Theory	Practical
Paper-I	3	0
Paper-II	3	0
Paper-III	3	0
Practical-I		1
Elective Course-I (other than the field of specialization)		0
Research Project / Advanced Practical / Position Paper (literature survey)		2
Total	12	3
Course Title	Credi	t hours
Semester - VIII Specialization (Inorganic/Organic/Physical/Applied/ Analytical/Bio Chemistry)	Theory	Practical
Semester - VIII Specialization (Inorganic/Organic/Physical/Applied/	Theory 3	Practical 0
Semester - VIII Specialization (Inorganic/Organic/Physical/Applied/ Analytical/Bio Chemistry)	-	
Semester - VIII Specialization (Inorganic/Organic/Physical/Applied/ Analytical/Bio Chemistry) Paper-IV	3	0
Semester - VIII Specialization (Inorganic/Organic/Physical/Applied/ Analytical/Bio Chemistry) Paper-IV Paper-V	3	0 0
Semester - VIII Specialization (Inorganic/Organic/Physical/Applied/ Analytical/Bio Chemistry) Paper-IV Paper-V Paper-VI	3 3 3	0 0 0
Semester - VIII Specialization (Inorganic/Organic/Physical/Applied/ Analytical/Bio Chemistry) Paper-IV Paper-V Paper-VI Practical-II	3 3 3 0	0 0 0 1

Department of Computer Science

Programs:

- BS Computer Science (4 Years)
- BS Data Science (4 Years)
- BS Information Technology (4 Years)
- Diploma in Information Technology (1 Year)

Faculty



Mr. Shayhaq Ali Chairperson (Acting) MS in Computer Science (MAJU Karachi, PK)

Faculty

Mr. Muhammad Akram

- MS in Information Technology (Hamdard University Karachi, PK)
- Mr. Hafeez Ullah
 - MS in Computer Science (MAJU Karachi, PK)
- Mr. Mir Bilal Khan

MS in Data Science (University of Hertfordshaire, UK)

Ms. Haim Gul

MS in Computer Science (Comsat University Islamabad, PK)

Teaching Fellows

Ms. Jaweria Nabi Bakhsh (Lab Instructor)

MS Computer Science | Virtual University of Pakistan | PK ((in-progress))

Mr. Faisal Ahmed

MS in Applied Mathematics | NED University of Engineering and Technology Karachi |PK (in

progress)

Nasir Ali

MS Software Engineering | Mohammad Ali Jinnah University Karachi | PK (2024)

Introduction

The University of Gwadar's Department of Computer Science is one of the predecessor departments, have been established in 2017 as an undergraduate program in conjunction with the campus's opening. Computers and digital communication have become a fundamental component of the infrastructure of business, government, research, and even regular social contact as a result of the digital era.

Scientists hold the keys to the next generation's routine wonders, as the speed of innovation and technological growth accelerates.

The University of Gwadar's Department of Computer Science (CS) is well positioned to help those future intellectual leaders, entrepreneurs, thinkers, and innovators to succeed.

The University of Gwadar, as an institution, ensures that its students have a life-changing experience.

At the University of Gwadar, you can study computer science in a variety of ways to suit your needs. Whether you want an in-depth education in computer science's conceptual foundations and complex software and hardware systems, an informed understanding of the aesthetic aspects of digital media design, expertise in the design and analysis of the complex networks that are reshaping our society, or to learn more about artificial intelligence, computer vision, control systems, dynamics, machine learning, or the programming that will produce tomorrow's inn.

At our departmental events, presentations by outstanding leaders in their fields add rigour, breadth, and relevance to the research and education experience.

The University of Gwadar fosters an academic environment in which research and education are informed by one another.

We invite you to join us at the Department of Computer Science, which is an exciting place to be.

Department Mission

The Computer Science Department aspires to excellence in the creation, application, and transmission of knowledge in computer science, as well as the establishment of an exceptional community of students and teachers dedicated to innovative scientific and knowledge research and education for the benefit of participants, Gwadar, Pakistan, and the rest of the globe.

Objective of the department

- To offer high-quality, all-encompassing educational programs and services, as well as educational and training opportunities that may be tailored to meet changing demands.
- To give a solid foundation of information, skills, and critical thinking abilities as well as to understand and respect variety and differences.
- To connect basic principles to practical applications and to prepare students for work in a variety of settings or for further study and a profession requiring knowledge and skills in information technology.

The department offer following programs:

Bachelor of Science in (Computer Science)

Computer science is the study of the theory, experimentation, and engineering that form the basis for the design and use of computers. It is the scientific and practical approach to computation and its applications and the systematic study of the feasibility, structure, expression, and mechanization of the methodical procedures (or algorithms) that underlie the acquisition, representation, processing, storage, communication of, and access to information. Computer Science is the application of a systematic, disciplined and quantifiable approach to the design, development, operation, and maintenance of software systems. It is in fact the practice of designing and implementing large, reliable, efficient and economical software by applying the principles and practices of engineering. The program aims to train students in all aspects of software life cycle from specification through analysis and design to testing, maintenance and evaluation of software.

Bachelor of Science in (Information Technology)

The program develops well-rounded scientific and educational workforce in the field of information technology, with a depth of knowledge and research capability. The course work is a good blend of theoretical and practical work that helps students acquire the capacity to critically examine an issue in terms of how to solve it in the most practical way. Students may improve their abilities by adopting new computer technologies via self-directed professional growth and training, as well as the capacity to communicate information effectively. On the basis of their learning and research, the program is created in such a manner that students are capable of applying their abilities to certain specialist areas after completing their studies and research.

Bachelor of Science in (Data Science)

BS (Data Science) has a dual emphasis on basic principles of statistics and computer science, with foundational training in statistical and mathematical aspects of data analysis. This program develops foundation on broad computer science principles, including algorithms, data

structures, data management and machine learning. This program will prepare graduates for a career in data analysis, combining foundational statistical concepts with computational principles from computer science.

Program Educational Objectives (PEO's) BS(CS), BS(DS) & BS(IT)

The goal of the program is to produce entrepreneurs with great character, competence, vision, and drive who are equipped with up-to-date knowledge, marketable skills, valuable competencies, unique expertise, globally compatible dispositions, and culturally and professionally acceptable values to take on appropriate professional roles in the information technology domain or proceed to further or higher education or training.
Introduction

One of the program's primary goals is to provide students with the skills and knowledge necessary to take on appropriate professional positions in IT and advance to leadership positions.

- Apply computing and mathematics knowledge appropriate to the discipline.
- Analyze a problem and identify and define the computing requirements needed to solve it.
- Create, implement, and test a computer-based system, process, component, or programme to meet specific requirements.
- Work effectively in groups to achieve a common goal.
- Understand the professional, ethical, legal, security, and social issues and responsibilities.
- Communicate effectively with a variety of audiences.
- Examine the local and global impact of computing on individuals, organizations, and society.
- Recognize the importance of, and ability to engage in, continuing professional development.
- Apply current techniques, skills, and tools for computing practice.
- Utilize and apply cutting-edge technical concepts and practices in core information technologies.
- Identify and analyze user needs and incorporate them into the design, development, testing, and administration of computer-based systems.
- Integrate information technology-based solutions into the user environment.
- Understand best practices and standards, as well as how to apply them.
- Assist in the development of an efficient project plan.

Program Learning Outcomes (PLO's) BS(CS), BS(DS) & BS(IT)

Computing programs prepare students to attain educational objectives by ensuring that students demonstrate achievement of the following outcomes.

(derived from Graduate Attributes define by Seoul Accord). Source: www.seoulaccord.org

Academic Education

To prepare graduates as computing professionals.

Knowledge for Solving Computing Problems

Apply knowledge of computing fundamentals, specialization, and mathematics, science, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.

Problem Analysis

Identify, formulate, research literature, and solve complex computing problems reaching substantiated conclusions using fundamental principles of mathematics, computing sciences, and relevant domain disciplines.

Design/Development of Solutions

Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.

Individual and Team Work

Function effectively as an individual and as a member or leader in diverse teams and in multi-disciplinary settings.

Communication

Communicate effectively with the computing community and with society at large about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.

Computing Professionalism and Society

Understand and assess societal, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practice.

Ethics

Understand and commit to professional ethics, responsibilities, and norms of professional computing practice.

Life-long Learning

Recognize the need, and have the ability, to engage in independent learning for continual development as a computing professional.

Facilities for Computer Science Department

System Lab

The System laboratory is used mainly by seniors of Information Technology (IT) Data Science (DS) and Computer Science (CS) programs for developing their final year projects. This lab is equipped with 30 Core-i7 workstations running on Windows operating systems, network simulation software tools, Visual Studio 2020, and other simulation and development software. Students are allowed to add hardware and accessories according to their project requirements.

Admission Criteria

 At least 50% marks in Intermediate (HSSC) examination with Mathematics or equivalent qualification with Mathematics, certified by IBCC.

OR

At least 50% marks in Intermediate (HSSC) examination with pre-Medical or equivalent qualification, certified by IBCC.

Deficiency

Students with pre-medical, must have to pass deficiency course of Mathematics of 3 credit hours in second semester.

Fee Structure of BS(CS), BS(DS) & BS(IT)

Sr. No	Detail of Charges	Amount
1	Admission Fee (One-time fee)	2,000
2	Tuition Fee	9,000
3	Security Money Refundable (Onetime fee)	2,000
4	Examination fee	250
5	Identity Card	200
6	Lab fee	2,000
7	Sports Fee	250
8	Transport Fee per semester	250
9	Library Fee	250
10	Total (First Semester Fee)	16,200
11	Fee per semester from 2 nd to 8 th	12,200



Degree Requirement for BS in (Computer Science)

For obtaining Bachelor of Science in Computer Science degree, a student has to complete Minimum 133-136 credit hours with a CGPA of 2.0 or above.

Course requirements for obtaining BS (CS) degree offered by Department of Computer Science are given below;

Course Category	Course Code	Course Title	Credit hours	Total Credits	
	CS-221-221L	Programming Fundamentals	3+1		
	CS-321-321L	Data Structures & Algorithms	3+1		
ses	CS-322-321L	Object Oriented Programming	3+1		
Computing Core Courses	CS-311	Discrete Structures	3+0		
ore (CS-312	Software Engineering	3+0	39	
ing C	CS-323-323L	Computer Networks	3+1	39	
mput	CS-324-324L	Database Systems	3+1		
ပိ	CS-313	Information Security	3+0		
	CS-325-325L	Operating Systems	3+1		
	CS-471-472	Final Year Project	0+6		
rses	CS-342	Compiler Construction	3		
Cou	CS-425-425L	Comp. Organization & Assembly Language	3+1	24	
Core	CS-327-327L	Digital Logic Design	3+1		
nputer Science Core Courses	CS-343	Design & Analysis of Algorithms	3+0		
er Sci	CS-414	Parallel & Distributed Computing	3+0		
pute	CS-426-426L	Artificial Intelligence	3+1		
Com	CS-315	Theory of Automata	3+0		
Course Category	Course Code	Course Title	Credit hours	Total Credits	
e e s	MT-311	Differential Equations	3+0		
cienc	MT-312	Multi-variate Calculus	3+0		
ter S ing C	CS-415	Graph Theory	3+0	09	
Computer Science Supporting Courses	CS-416	Theory of Programming Languages	3+0		
Sul	CS-417	Numerical Computing	3+0		

Course Category	Course Code	Course Title	Credit hours	Total Credits
	SS-211	Introduction to Sociology	3+0	
S	SS-212	Introduction to Logic	3+0	
ourse	SS-21X	Foreign Languages	3+0	
ve- Cc	ACT-211	Principles of Accounting	3+0	
University Elective- Courses	MG-212	Organizational Behavior	3+0	12
rsity E	MG-213	Entrepreneurship	3+0	
Jniver	MG-214	Principles of Management	3+0	
	MG-341	Human Resource Management	3+0	
	MT-211	Basic Mathematics -I	3+0	
Course Category	Course Code	Course Title	Credit hours	Total Credits
s urse	PHY-211-211L	Applied Physics	2+1	
Science & Mathematics Foundation Course	MT-212	Calculus & Analytical Geometry	3+0	12
Scier Aathe ndatic	MT-213	Linear Algebra	3+0	12
Four	ST-211	Probability & Statistics	3+0	
Course Category	Course Code	Course Title	Credit hours	Total Credits
	ICT-221-221L	Introduction to ICT	2+1	
urses	EG-211	English Composition & Comprehension	3+0	
on Co	HM-211	Islamic Studies/ Ethics	2+0	
ucatio	EG-311	Communication & Presentation Skills	3+0	09
General Education Courses	HM-212	Pakistan Studies	2+0	
Genei	EG-312	Technical & Business Writing	3+0	
-	HM-341	Professional Practices	3+0	

Course Category	Course Code	Course Title	Credit hours	Total Credits
	SE-345	Software Engineering Economics	3	
	SE-346	Human Computer Interaction	3	
	CS-353-353L	Mobile Application Development	2+1	
	CS-354-354L	Computer Game Development	2+1	
	CS-355-355L	Visual Programming	2+1	
	CS-356-356L	Multimedia Technologies	2+1	
	CS-357-357L	Web Engineering	2+1	
	CS-421-421L	Enterprise Application Development	2+1	
	CS-422-422L	Systems Programming	2+1	
	SE-411	Software Quality Engineering	3	
	SE-412	Software Design and Architecture	3	
a	SE-413	Software Project Management	3	
rses	SE-441	Data Warehousing	3	
es cou	SE-442	Data Mining	3	
CS Electives (Choose any five courses)	CS-423-423L	Digital Forensics	2+1	15
s Ele any	CS-441	Cryptography	3	15
ose Cc	CS-451	Network Security	3	
Cho	CS-424	Wireless Networks	3	
C	CS-442-442L	Computer Vision	2+1	
	CS-358	Artificial Intelligence	3	
	CS-453-453L	Digital Image Processing	2+1	
	CS-454	Machine Learning	3	
	CS-341	Cloud Computing	3	
	CS-359	Network Design and Management	3	
	CS-431	Parallel & Distributed Computing	3	
	CS-411	Introduction to Data Science	3	
	CS-412	Blockchain Technology	3	
	CS-413-413L	Internet of Things	2+1	
	CS-414-414L	System And Network Administration	2+1	
	CS-425-425L	Advanced Databases	2+1	
		Deficiency Course For Pre-Medical Students		
	MT-111	Basic Mathematics-II	3+0	3

Proposed Semester Wise Study Plan of BS in (Computer Science) Tentative course offering plan for BS in (Computer Science) degree offered for Spring 2022 in given below in a semester wise format.

	Course Code	Course Title	Pre-requisite	Credit Hours
	MT-211	Basic Mathematics -I	None	3
_	ICT-221	Introduction to ICT	None	2
er s-18)	ICT-221L	Introduction to ICT Lab	None	1
l⁵t Semester edit Hours-	SS-212	Introduction to Logic (University Elective - I)	None	3
Sen dit H	EG-211	English Composition & Comprehension	None	3
1 st Se (Credit	PHY-211	Applied Physics	None	3
Ŭ	PHY-211L	Applied Physics Lab	None	1
	HM-211	Islamic Studies/ Ethics	None	2

Cou	rse Code	Course Title	Pre-requisite	Credit Hours
	MT-111	Basic Mathematics -II*	None	3
۲ 18)	CS-221	Programming Fundamentals	None	3
	<u>a</u> i	Programming Fundamentals Lab	None	1
em Ho	CS-311	Discrete Structures	None	3
2 nd S (Credit	EG-311	Communication & Presentation Skills	None	3
TM C N	MT-212	Calculus & Analytical Geometry	None	3
	HM-212	Pakistan Studies	None	2

Course Code		Course Title	Pre-requisite	Credit Hours
	CS-322	Object Oriented Programming	Programming Fundamentals	3
r 18)	CS-321L	Object Oriented Programming Lab	Programming Fundamentals	1
ster rs-18	CS-323	Computer Networks	None	3
3rd Semester Credit Hours-1	CS-323L	Computer Networks Lab	None	1
rd Se edit	ST-211	Probability & Statistics	None	3
C ² 3	CS-327	Digital Logic Design	Applied Physics	3
	CS-327	Digital Logic Design Lab	Applied Physics	1
	MT-213	Linear Algebra	None	3

C	ourse	e Code	Course Title	Pre-requisite	Credit Hours
		CS-425	Comp Organization & Assembly Language	None	3
	2	CS-425	Comp Organization & Assembly Language Lab	None	1
ster	rs-17	MT-312	Multi-variate Calculus	None	3
4th Semester (Credit Hours-1	4th Semester (Credit Hours-17)	CS-321	Data Structures & Algorithms	Programming Fundamentals	3
		CS-321L	Data Structures & Algorithms Lab	Programming Fundamentals	3
	2	CS-312	Software Engineering	None	3
		SS-211	Introduction to Sociology (University Elective – II	None	3
С	ourse	e Code	Course Title	Pre-requisite	Credit Hours
		CS-324	Database Systems	None	3
, F	<u> </u>	CS-324L	Database Systems Lab	None	1
5th Semester (Credit Hours-17)	-sun	EG-312	Technical & Business Writing	None	3
	t Ho	CS-325	Operating Systems	None	3
	(Credi	CS-325L	Operating Systems Lab	None	1
- 2		CS-417	Numerical Computing	None	3
		CS-315	Theory of Automate	None	~
		03-315	Theory of Automata	None	3
С		Code	Course Title	Pre-requisite	Credit Hours
C	ourse				Credit
	ourse	Code	Course Title	Pre-requisite Discrete Structure Discrete Structure	Credit Hours
ter 5-16)	ourse	Code CS-426	Course Title Artificial Intelligence	Pre-requisite Discrete Structure	Credit Hours 3
ter c_16)	ourse	Code CS-426 CS-426L	Course Title Artificial Intelligence Artificial Intelligence Lab	Pre-requisite Discrete Structure Discrete Structure Calculus & Analytical	Credit Hours 3 1
ter c_16)		Code CS-426 CS-426L MT-311	Course Title Artificial Intelligence Artificial Intelligence Lab Differential Equations	Pre-requisite Discrete Structure Discrete Structure Calculus & Analytical Geometry Data structure	Credit Hours 3 1 3
ter c_16)		Code CS-426 CS-426L MT-311 CS-343	Course Title Artificial Intelligence Artificial Intelligence Lab Differential Equations Design and Analysis of Algorithms	Pre-requisite Discrete Structure Discrete Structure Calculus & Analytical Geometry Data structure and Algorithm	Credit Hours 3 1 3 3
6th Semester (Crodit Lours 16)		Code CS-426 CS-426L MT-311 CS-343 CS-313	Course Title Artificial Intelligence Artificial Intelligence Lab Differential Equations Design and Analysis of Algorithms Information Security	Pre-requisite Discrete Structure Discrete Structure Calculus & Analytical Geometry Data structure and Algorithm	Credit Hours 3 1 3 3 3 3
6th Semester (Crodit Lours 16)		Code CS-426 CS-426L MT-311 CS-343 CS-313 CS-313	Course Title Artificial Intelligence Artificial Intelligence Lab Differential Equations Design and Analysis of Algorithms Information Security CS Elective - I	Pre-requisite Discrete Structure Discrete Structure Calculus & Analytical Geometry Data structure and Algorithm None	Credit Hours 3 1 3 3 3 3 3 Credit
6th Semester	ourse	Code CS-426 CS-426L MT-311 CS-343 CS-313 CS-313 CS-313	Course Title Artificial Intelligence Artificial Intelligence Lab Differential Equations Design and Analysis of Algorithms Information Security CS Elective – I Course Title	Pre-requisiteDiscrete StructureDiscrete StructureCalculus & Analytical GeometryData structure and AlgorithmNonePre-requisiteNoneOperating Systems	Credit Hours 3 1 3 3 3 3 3 Credit Hours
6th Semester	ourse ourse CS-4	Code CS-426 CS-426L MT-311 CS-343 CS-313 CS-313 CS-313 H71 H14	Course Title Artificial Intelligence Artificial Intelligence Lab Differential Equations Differential Equations Design and Analysis of Algorithms Information Security CS Elective – 1 Course Title	Pre-requisite Discrete Structure Discrete Structure Calculus & Analytical Geometry Data structure and Algorithm None Pre-requisite None Operating	Credit Hours 3 1 3 3 3 3 3 Credit Hours 3
6th Semester	ourse CS-4	Code CS-426 CS-426L MT-311 CS-343 CS-313 CS-313 Code H71 H4 342	Course Title Artificial Intelligence Artificial Intelligence Lab Differential Equations Differential Equations Design and Analysis of Algorithms Information Security CS Elective - 1 Einal Year Project - 1 Parallel & Distributed Computing	Pre-requisite Discrete Structure Discrete Structure Calculus & Analytical Geometry Data structure and Algorithm None Pre-requisite None Operating Systems Theory of	Credit 3 1 3
6th Semester (Crodit Lours 16)	ourse CS-4 CS-3	Code CS-426 CS-426L MT-311 CS-343 CS-313 CS-313 Code H71 H4 342	Course Title Artificial Intelligence Artificial Intelligence Lab Differential Equations Differential Equations Design and Analysis of Algorithms Information Security CS Elective - 1 Course Title Final Year Project - 1 Parallel & Distributed Computing Compiler Construction	Pre-requisite Discrete Structure Discrete Structure Calculus & Analytical Geometry Data structure and Algorithm None Pre-requisite None Operating Systems Theory of Automata	Credit 3 1 3

Course Code		Course Title	Pre-requisite	Credit Hours
. (8)	CS-472	Final Year Project – II	None	3
emester Hours-1	MG-213	Entrepreneurship (University Elective IV)	None	3
eme t Hou	HM-341	Professional Practices	None	3
8 th Se redit		CS Elective – IV		3
Ū		CS Elective-V		3

* Fsc (Pre-Medical) deficiency courses will not be counted toward the CGPA.



Degree Requirement for BS in (Data Science)

For obtaining Bachelor of Science in Data Science degree, a student has to complete Minimum 133-136 credit hours with a CGPA of 2.0 or above.

Course requirements for obtaining BS (DS) degree offered by Department of Computer Science are given below;

Course Category	Course Code	Course Title	Credit hours	Total Credits
	CS-221-221L	Programming Fundamentals	3+1	
	CS-321-321L	Data Structures & Algorithms	3+1	
rses	CS-322-322L	Object Oriented Programming	3+1	
Cou	CS-311	Discrete Structures	3+0	39
Core	CS-312	Software Engineering	3+0	
Computing Core Courses	CS-323-323L	Computer Networks	3+1	39
Iputi	CS-324-324L	Database Systems	3+1	
Con	CS-313	Information Security	3+0	
	CS-325-325L	Operating Systems	3+1	
	IT-471-472	Final Year Project	0+6	
Course Category	Course Code	Course Title	Credit hours	Total Credits
	ST-311	Advance Statistics	3+0	18
e e	CS-411	Introduction to Data Science	2+1	
Data Science Core Courses	SE-442	Data Mining	3+0	
Data S Core C	DS-411	Data Visualization	2+1	
ပိ ပိ	DS-412	Data Warehousing & Business Intelligence	3+0	
	DS-413	Big Data Analytics	2+1	
Course Category	Course Code	Course Title	Credit hours	Total Credits
	SS-211	Introduction to Sociology	3+0	
Ses	SS-212	Introduction to Logic	3+0	
Sours	SS-21X	Foreign Language (Chinese, Persian, Arabic)	3+0	
ive C	ACT-211	Principles of Accounting	3+0	
ect	MG-212	Organizational Behavior	3+0	15
University Elective Courses	MG-213	Entrepreneurship	3+0	
ivers	MG-214	Principles of Management	3+0	
C	MG-341	Human Resource Management	3+0	
	MT-211	Basic Mathematics -I	3+0	

Course Code	Course Title	Credit hours	Total Credits	
MT-212	Calculus & Analytical Geometry	3+0		
MT-213	Linear Algebra	3+0	10	
ST-211	Probability & Statistics	3+0	12	
MT-311	Differential Equations	3+0		
Course Code	Course Title	Credit hours	Total Credits	
ICT-221-221L	Introduction to ICT	3+0		
EG-211	English Composition & Comprehension	2+1		
HM-211	Islamic Studies/ Ethics	3+0		
EG-311	Communication & Presentation Skills	2+1	19	
HM-212	Pakistan Studies	3+0		
EG-312	Technical & Business Writing	2+1		
HM-341	Professional Practices	3+0		
Course Code	Course Title	Credit hours	Total Credits	
SE-346	Human Computer Interaction	3+0		
CS-422-422L	Systems Programming	2+1		
SE-441	Data Warehousing	3+0		
CS-442-442L	Computer Vision	2+1		
CS-454	Machine Learning	2+1		
CS-341	Cloud Computing	3+0		
CS-412	Blockchain Technology	3+0		
DS-311	Deep Learning	2+1	12	
CS-315	Theory of Automata & Formal Languages	3+0	12	
DS-416	Natural Language Processing	2+1		
CS-357-357L	Artificial Neural Networks	2+1		
CS-359	Speech Processing	3+0		
CS-358	Agent Based Modeling	3+0		
DS-316	Text Mining	3+0		
DS-312	Topics in Data Science	3+0		
CS-457	Advance Database Management Systems	3+0		
	Deficiency Course For Pre-Medical Students			
	NT-212NT-213ST-211MT-311Course CodeICT-221-221L2ICT-221-221L2ICT-211IG-211IG-311IG-312IM-341ICS-342SE-346ISE-346ISE-346ISE-341ICS-442-442L2ICS-412ICS-341ISS-341	MT-212Calculus & Analytical GeometryMT-213Linear AlgebraST-211Probability & StatisticsMT-313Differential EquationsCourse CodeCourse TitleCourse CodeCourse TitleEG-211Introduction to ICTEG-211English Composition & ComprehensionHM-211Islamic Studies/ EthicsEG-311Communication & Presentation SkillsHM-212Pakistan StudiesEG-312Technical & Business WritingHM-341Professional PracticesSE-346Human Computer InteractionCS-422-4224Systems ProgrammingSE-341Data WarehousingCS-442-442Computer VisionCS-442Blockchain TechnologyCS-341Deep LearningCS-315Theory of Automata & Formal LanguagesDS-316Speech ProcessingCS-357-3574Artificial Neural NetworksCS-358Agent Based ModelingDS-316Text MiningDS-312Topics in Data ScienceCS-435Agent Based ModelingDS-316Text MiningDS-312Topics in Data ScienceCS-435Agent Based ModelingDS-312Topics in Data ScienceCS-435Agent Based ModelingDS-312Topics in Data ScienceCS-435Agent Based ModelingDS-314Topics in Data ScienceCS-435Agent Based ModelingDS-314Text MiningDS-315Text MiningDS-316Text Mining <td>MT-212Calculus & Analytical Geometry3+0MT-213Linear Algebra3+0ST-211Probability & Statistics3+0MT-311Differential Equations3+0Course CodeCourse TitleCredit hoursICT-221-221LIntroduction to ICT3+0EG-211English Composition & Comprehension2+1HM-211Islamic Studies/ Ethics3+0EG-311Communication & Presentation Skills2+1HM-212Pakistan Studies3+0EG-312Technical & Business Writing2+1HM-341Professional Practices3+0SE-346Human Computer Interaction3+0CS-422-422LSystems Programming2+1SE-346Gourse Title3+0CS-442-442LComputer Vision2+1CS-454Machine Learning2+1CS-454Blockchain Technology3+0CS-412Blockchain Technology3+0CS-313Theory of Automata & Formal Languages3+0CS-357-357Artificial Neural Networks2+1CS-358Agent Based Modeling3+0CS-314Topics in Data Science3+0CS-315Theory of Automata & Formal Language3+0CS-358Agent Based Modeling3+0CS-316Text Mining3+0CS-312Topics in Data Science3+0CS-314Topics in Data Science3+0CS-315Topics in Data Science3+0CS-316Text Mining3+0</td>	MT-212Calculus & Analytical Geometry3+0MT-213Linear Algebra3+0ST-211Probability & Statistics3+0MT-311Differential Equations3+0Course CodeCourse TitleCredit hoursICT-221-221LIntroduction to ICT3+0EG-211English Composition & Comprehension2+1HM-211Islamic Studies/ Ethics3+0EG-311Communication & Presentation Skills2+1HM-212Pakistan Studies3+0EG-312Technical & Business Writing2+1HM-341Professional Practices3+0SE-346Human Computer Interaction3+0CS-422-422LSystems Programming2+1SE-346Gourse Title3+0CS-442-442LComputer Vision2+1CS-454Machine Learning2+1CS-454Blockchain Technology3+0CS-412Blockchain Technology3+0CS-313Theory of Automata & Formal Languages3+0CS-357-357Artificial Neural Networks2+1CS-358Agent Based Modeling3+0CS-314Topics in Data Science3+0CS-315Theory of Automata & Formal Language3+0CS-358Agent Based Modeling3+0CS-316Text Mining3+0CS-312Topics in Data Science3+0CS-314Topics in Data Science3+0CS-315Topics in Data Science3+0CS-316Text Mining3+0	

Semester Wise Study Plan of BS in (Data Science)

Tentative course offering plan for BS in (Data Science) degree offered for Spring 2022 is given below in a semester wise format.

Course Code		Course Title	Pre-requisite	Credit Hours
	MT-211	Basic Mathematics -I	None	3
	ICT-221	Introduction to ICT	None	2
er s-18)	ICT-221L	Introduction to ICT Lab	None	1
Semester lit Hours-	SS-212	Introduction to Logic	None	3
Sen dit F	EG-211	English Composition & Comprehension	None	3
1⁵t Se (Credit	PHY-211	Applied Physics	None	3
-	PHY-211L	Applied Physics Lab	None	1
	HM-211	Islamic Studies/ Ethics	None	2

С	ourse Code	Course Title	Pre-requisite	Credit Hours
ster ırs-18)	MT-111	Basic Mathematics -II*	None	3
	CS-221	Programming Fundamentals	None	3
	CS-221L	Programming Fundamentals Lab	None	1
Semeste it Hours-	EG-311	Communication & Presentation Skills	None	3
2 nd S ₀ (Credit	MT-212	Calculus & Analytical Geometry	MT-211	3
	CS-311	Discrete Structures	None	3
	HM-212	Pakistan Studies	None	2

* Deficiency courses for Fsc. Pre-Medical Students, shall not be counted in CGPA calculation

С	ourse Code	Course Title	Pre-requisite	Credit Hours
ester urs-17)	CS-321	Object Oriented Programming	CS-221	3
	CS-321L	Object Oriented Programming Lab	CS-221L	1
	CS-312	Software Engineering	None	3
Ho H	CS-323	Computer Networks	None	3
3rd Se (Credit	CS-323L	Computer Networks Lab	None	1
	ST-211	Probability & Statistics	None	3
	MT-213	Linear Algebra	None	3

C	ourse Code	Course Title	Pre-requisite	Credit Hours
	CS-324	Database Systems	None	3
7)	CS-324L	Database Systems Lab	None	1
	CS-321	Data Structures & Algorithms	CS-221	3
Semester it Hours-1	CS-321L	Data Structures & Algorithms Lab	CS-221L	1
4 th S ₍ (Credit	MT-311	Differential Equations	Calculus & Analytical Geometry	3
S	CS-411	Introduction to Data Science	Artificial Intelligence	2
	CS-411L	Introduction to Data Science lab	None	1
	SS-211	Introduction to Sociology (University Elective – II)	None	3

C	ourse Code	Course Title	Pre-requisite	Credit Hours
emester Hours-17)	CS-343	Design and Analysis of Algorithms	Data structure and Algorithm	3
	CS-313	Information Security	None	3
	CS-426	Artificial Intelligence	OOP	3
Semester it Hours-1	CS-426L	Artificial Intelligence Lab	OOP	1
5 th S (Credi	CS-325	Operating Systems	None	3
	CS-325L	Operating Systems Lab	None	1
	ACT-211	Principles of Accounting (University Elective – III)	None	3

C	ourse Code	Course Title	Pre-requisite	Credit Hours
	EG-312	Technical & Business Writing	None	3
CS-44 DS-44 DS-44	CS-425	Comp Organization & Assembly Language	OS	3
	CS-425L	Comp Organization & Assembly Language Lab	OS	1
	SE-442	Data Mining	Intro. To Data Science	3
	DS-412	Data Warehousing & Business Intelligence	Intro. To Data Science	3
ိပ္	ST-311	Advance Statistics	Probability & Statistics	3

C	ourse Code	Course Title	Pre-requisite	Credit Hours
	DS-471	Final Year Project I	None	2
	DS-413	Big Data Analytics	Inro. Data Science	2
16) 16)	DS-413L	Big Data Analytics Lab	Inro. Data Science Lab	1
Semester it Hours-1	CS-414	Parallel & Distributed Computing	Operating Systems	3
	DS-411	Data Visualization	Data Warehousing & Business Intelligence	2
7th (Cre	DS-411L	Data Visualization Lab	Data Warehousing & Business Intelligence	1
		DS Elective – I		3
		DS Elective – II		3

С	ourse Code	Course Title	Pre-requisite	Credit Hours
(9	IT-472	Final Year Project II	None	4
8 th Semester (Credit Hours-16)	MG-213	Entrepreneurship (University Elective IV)	None	3
	HM-341	Professional Practices	None	3
		DS Elective – III		3
9		DS Elective – IV		3



Degree Requirement for BS in (Information Technology)

For obtaining Bachelor of Science in Information Technology degree, a student has to complete Minimum 133-136 credit hours with a CGPA of 2.0 or above.

Course requirements for obtaining BS (IT) degree offered by Department of Computer Science are given below;

Course Category	Course Code	Course Title	Credit hours	Total Credits
	CS-221-221L	Programming Fundamentals	3+1	
	CS-321-321L	Data Structures & Algorithms	3+1	
Ses	CS-322-322L	Object Oriented Programming	3+1	
Cour	CS-311	Discrete Structures	3+0	
ore	CS-312	Software Engineering	3+0	39
Computing Core Courses	CS-323-323L	Computer Networks	3+1	39
nput	CS-324-324L	Database Systems	3+1	
Con	CS-313	Information Security	3+0	
	CS-325-325L	Operating Systems	3+1	
	IT-471-472	Final Year Project	0+6	
Course Category	Course Code	Course Title	Credit hours	Total Credits
ore	IT-321	Web Technologies	2+1	
Information Technology Core Courses	IT-311	Information Technology Infrastructure	3+0	
nolo es	IT-351-351L	Database Administration and Management	3+1	
n Techno Courses	IT-312	Information Technology Project Management	3+0	24
Co	IT-352-352L	System and Network Administration	3+1	
orma	IT-341	Cyber Security	3+0	
Info	IT-353	Virtual Systems and Services	3+1	
Course Category	Course Code	Course Title	Credit hours	Total Credits
Ses	SE-341	Enterprise Systems	3+0	
tion ogy Cour	SE-342	Modeling and Simulation	3+0	
Information Technology Supporting Courses	SE-343	Software Requirements Engineering	3+0	09
Info Tec	SE-344	Formal Methods	3+0	
Sup	CS-391	Operations Research	3+0	

Course Category	Course Code	Course Title	Credit hours	Total Credits
	SS-211	Introduction to Sociology	3+0	
University Elective Courses	SS-212	Introduction to Logic	3+0	
	SS-21X	Foreign Languages	3+0	
	MG-211	Principles of Accounting	3+0	
Electi	MG-212	Organizational Behavior	3+0	12
rsity	MG-213	Entrepreneurship	3+0	
Unive	MG-214	Principles of Management	3+0	
_	MG-341	Human Resource Management	3+0	
	MT-211	Basic Mathematics -I	3+0	
Course Category	Course Code	Course Title	Credit hours	Total Credits
s urse	PHY-211-211L	Applied Physics	2+1	12
Science & Mathematics Foundation Course	MT-212	Calculus & Analytical Geometry	3+0	
Scier Iathe ndatic	MT-213	Linear Algebra	3+0	
Four	ST-211	Probability & Statistics	3+0	
Course Category	Course Code	Course Title	Credit hours	Total Credits
	ICT-221-221L	Introduction to ICT	2+1	
urses	EG-211	English Composition & Comprehension	3+0	
on Co	HM-211	Islamic Studies/ Ethics	2+0	
ucatio	EG-311	Communication & Presentation Skills	3+0	09
al Ed	HM-212	Pakistan Studies	2+0	
General Education Courses				
Gen	EG-312	Technical & Business Writing	3+0	

Course Category	Course Code	Course Title	Credit hours	Total Credits		
	SE-345	Software Engineering Economics	3			
	SE-346	Human Computer Interaction	3			
	CS-353	Mobile Application Development	2+1			
	CS-354	Computer Game Development	2+1			
	CS-355	Visual Programming	2+1			
	CS-356	Multimedia Technologies	2+1			
	CS-357	Web Engineering	2+1			
	CS-421	Enterprise Application Development	2+1			
	CS-422	Systems Programming	2+1			
	SE-411	Software Quality Engineering	3			
	SE-412	Software Design and Architecture	3			
Ses	SE-413	Software Project Management	3	15		
coul	SE-441	Data Warehousing	3			
IT Electives (Choose any five courses)	SE-442	Data Mining	3			
. Ele any	CS-423	Digital Forensics	2+1			
II	CS-441	Cryptography	3			
Cho	CS-451	Network Security	3			
Ŭ	CS-424	Wireless Networks	3			
	CS-442	Computer Vision	2+1			
	CS-358	Artificial Intelligence	3			
	CS-453	Digital Image Processing	2+1			
	CS-454	Machine Learning	3			
	CS-341	Cloud Computing	3			
	CS-359	Network Design and Management	3			
	CS-431	Parallel & Distributed Computing	3			
	CS-411	Introduction to Data Science	3			
	CS-412	Blockchain Technology	3			
	CS-413	Internet of Things	(2+1)			
	Deficiency Course For Pre-Medical Students					
	MT-111	Basic Mathematics-II	3+0	3		

89

Semester Wise Study Plan

Semester Wise Study Plan of BS in (Information Technology)

Tentative course offering plan for BS in (Information Technology) degree offered for Spring 2022 is given below in a semester wise format.

Co	ourse Code	Course Title	Pre-requisite	Credit Hours
	MT-211	Basic Mathematics -I	None	3
	ICT-221	Introduction to ICT	None	2
er s-18)	ICT-221L	Introduction to ICT Lab	None	1
Semester dit Hours-	SS-212	Introduction to Logic	None	3
Sen dit H	EG-211	English Composition & Comprehension	None	3
1 st Se Credit	PHY-211	Applied Physics	None	3
Ŭ	PHY-211L	Applied Physics Lab	None	1
	HM-211	Islamic Studies/ Ethics	None	2

С	ourse Code	Course Title	Pre-requisite	Credit Hours
	MT-111	Basic Mathematics -II*	None	3
ster ırs-18)	CS-221	Programming Fundamentals	None	3
	CS-221L	Programming Fundamentals Lab	None	1
Semester it Hours-1	EG-311	Communication & Presentation Skills	None	3
2 nd S6 (Credit	MT-212	Calculus & Analytical Geometry	MT-211	3
C ² S	CS-311	Discrete Structures	None	3
	HM-212	Pakistan Studies	None	2

* Deficiency courses for Fsc. Pre-Medical Students, shall not be counted in CGPA calculation

C	course Code	Course Title	Pre-requisite	Credit Hours
	CS-321	Object Oriented Programming	CS-221	3
3 rd Semester (Credit Hours-17)	CS-321L	Object Oriented Programming Lab	CS-221L	1
	CS-312	Software Engineering	None	3
	CS-323	Computer Networks	None	3
	CS-323L	Computer Networks Lab	None	1
	ST-211	Probability & Statistics	None	3
	MT-213	Linear Algebra	None	3

C	ourse Code	Course Title	Pre-requisite	Credit Hours
4 th Semester (Credit Hours-17)	CS-324	Database Systems	None	3
	CS-324L	Database Systems Lab	None	1
	CS-321	Data Structures & Algorithms	CS-221	3
	CS-321L	Data Structures & Algorithms Lab	CS-221L	1
	SE-343	Software Requirements Engineering	CS-312	3
	CS-313	Information Security	None	3
	SS-211	Introduction to Sociology	None	3

Co	ourse Code	Course Title	Pre-requisite	Credit Hours
5 th Semester (Credit Hours-17)	IT-351	Database Administration and Management	CS-324	3
	IT-351L	Database Administration and Management Lab	CS-324L	1
	IT-311	Information Technology Infrastructure	None	3
	CS-325	Operating Systems	None	3
	CS-325L	Operating Systems Lab	None	1
	SE-341	Enterprise Systems	None	3
	MG-211	Principles of Accounting	None	3

Co	ourse Code	Course Title	Pre-requisite	Credit Hours
	EG-312	Technical & Business Writing	None	3
	CS-391	Operations Research	None	3
ster ırs-17)	IT-353	Virtual Systems and Services	CS-325	3
6 th Semester (Credit Hours-	IT-353L	Virtual Systems and Services Lab	CS-325L	1
	IT-352	System and Network Administration	CS-323	3
	IT-352L	System and Network Administration Lab	CS-323L	1
		IT Elective – I		3

Course Code		Course Title	Pre-requisite	Credit Hours
	IT-471	Final Year Project-I	None	3
3)	IT-321	Web Technologies	CS-221	2
emester Hours-18)	IT-321L	Web Technologies Lab	CS-221L	1
Semester it Hours-1	IT-312	IT Project Management	None	3
7 th Se (Credit	IT-341	Cyber Security	CS-313	3
0		IT Elective – II		3
		IT Elective – III		3

Course Code		Course Title	Pre-requisite	Credit Hours
6	IT-472	Final Year Project-II	None	3
ster urs-1	MG-213	Entrepreneurship	None	3
ieme t Hou	HM-341	Professional Practices	None	3
8 th Semester (Credit Hours-17)		IT Elective – IV		3
9		IT Elective – V		3



Diploma in Information Technology

Program Name:

ame: Diploma in Information Technology

Duration: 1 Year (2 Semesters)

Eligibility Criteria: Intermediate with 45% Marks

Diploma in Information Technology has been designed to equip students with an integrated set of skills that will allow them to develop their professional careers in the field of Information Technology.

Program Objectives

The Strategic objectives of Diploma in Information Technology Program are:

- To develop students with knowledge of basic IT and communication concepts.
- To familiarize students with IT applications, tools and technologies.
- To provide basis for future professional computer science education.

First Semester - Spring (Credit Hours-17)

Course Code	Course Title	Pre-requisite	Credit Hours	Theory	Practical
IT-211	Introduction to Computers	None	3	2	1
IT-212	Office Automation	None	2	0	2
IT-221	E-Commerce and Digital Marketing	None	4	2	2
IT-213	Hardware and PC Maintenance	None	2	0	2
CS-214	Computer Programming	None	4	2	2

Second Semester - Fall (Credit Hours-16)

Course Code	Course Title	Pre-requisite	Credit Hours	Theory	Practical
321	Database Management	CS-214	4	2	2
322	Computer Networks	None	4	2	2
331	Web Designing and Development	CS-214	4	2	2
332	Graphics and Multimedia Designing	None	3	1	2
471	Project	None	3	0	3

Department of Zoology

Programs:

BS Zoology (4 Years) Specialization in Fisheries



Introduction

The University of Gwadar's Department of Zoology is one of the predecessor departments, established in 2017 as an undergraduate program with the opening of the campus. Aquatic biodiversity, fisheries, and sustainable resource management have become essential pillars of environmental conservation, community livelihoods, and food security in today's world.

Scientists and professionals in fisheries and aquatic sciences hold the keys to addressing the pressing challenges of sustainable development, as the impact of climate change and overexploitation of resources continues to grow.

The University of Gwadar's Department of Zoology (Specialization in Fisheries) is well positioned to empower the next generation of intellectual leaders, researchers, conservationists, policymakers, and innovators to succeed in this vital field.

The University of Gwadar ensures that its students have a life-changing educational journey. At the University of Gwadar, you can study Zoology with a Specialization in Fisheries through a comprehensive, flexible approach that meets your aspirations. Whether you wish to gain in-depth knowledge of aguatic animal biology, fish taxonomy, freshwater and marine ecology, or build expertise in sustainable aquaculture, fisheries stock assessment, hatchery management, aquatic conservation, or the socio-economic aspects of fisheries - our program will help you develop both conceptual foundations and practical skills.

Our departmental activities include interactive seminars, field visits, and research presentations by renowned scientists and industry professionals, adding rigour, relevance, and real-world perspective to your learning experience.

The University of Gwadar fosters an academic environment where research and teaching inform and enrich one another — ensuring that students graduate ready to tackle global and local aquatic challenges.

We invite you to join us at the Department of Zoology — Specialization in Fisheries — which is an inspiring and rewarding place to grow.

Zoology is the study of animal life, covering the structure, function, evolution, ecology, and behavior of animals in diverse habitats. This specialization focuses on fisheries science — the responsible management and sustainable use of aquatic resources that are vital to millions of people worldwide. This program blends theoretical learning with field-based and laboratory training. Students explore fish biology, aquatic ecosystems, aquaculture practices, resource management, aquatic toxicology, and marine biodiversity

conservation. Emphasis is placed on understanding the complex balance between ecological sustainability and socio-economic development.

It is a scientific and practical approach to ensuring aquatic resources are protected and managed efficiently for the benefit of present and future generations. The program aims to train students in all aspects of fisheries — from species identification, population dynamics, and ecosystem health to modern aquaculture techniques and community-based fisheries management.

Program Educational Objectives (PEOs)

BS (Zoology — Specialization in Fisheries) The goal of the program is to produce graduates with sound character, scientific competence, vision, and commitment, equipped with up-to-date knowledge, field-based practical skills, and relevant expertise. These graduates will be capable of taking on meaningful professional roles in fisheries science, aquaculture, marine conservation, and environmental management, or proceeding to further advanced studies and research.

Our graduates will:

Apply their knowledge of zoology and fisheries science to address environmental and resource challenges effectively.

- Demonstrate practical skills in fisheries management, sustainable aquaculture, and conservation.
- Contribute to responsible decision-making and community empowerment for sustainable aquatic resource use.
- Engage in lifelong learning and adapt to new scientific advancements and technologies.
- Serve as responsible stewards of aquatic biodiversity, supporting Pakistan's and the global community's sustainable development goals.

Department Mission

The Zoology Department (Specialization in Fisheries) aspires to excel in the creation, application, and dissemination of knowledge in zoology and fisheries sciences. It is committed to building an outstanding community of students and teachers dedicated to innovative research and high-impact education for the betterment of local communities, Gwadar, Pakistan, and the world.

Objective of the Department

To offer high-quality, comprehensive educational programs and practical training that meet evolving scientific and community needs.

To provide students with a strong foundation of scientific knowledge, practical fieldwork skills, and critical thinking abilities, while instilling respect for biodiversity and ecological sustainability.

One of the program's primary goals

One of the program's primary goals is to provide students with the knowledge, skills, and hands-on experience necessary to take on professional roles in fisheries science, aquaculture, aquatic resource management, and conservation — and to grow into leadership positions in these vital fields.

Key Competencies Developed

Apply biological and ecological knowledge appropriate to the discipline of zoology and fisheries science.

Analyze environmental, biological, and socio-economic problems related to aquatic resources and identify effective solutions.

Design, implement, and evaluate fisheries management plans, aquaculture systems, or conservation programs to meet specific sustainability goals.

Work effectively as part of interdisciplinary teams to address complex challenges in aquatic resource management.

Understand professional, ethical, legal, cultural, and environmental responsibilities relevant to fisheries and aquatic biodiversity.

Communicate effectively with stakeholders, policymakers, local communities, and scientific audiences.

Assess the local and global impact of fisheries practices and aquaculture on ecosystems, communities, and economies.

Recognize the importance of and ability to engage in lifelong learning to stay updated with emerging research and technologies.

Use current techniques, tools, and field methods for fisheries assessment, monitoring, and conservation work.

Apply best practices and industry standards in aquaculture operations, sustainable harvesting, and stock management.

Identify community and industry needs and incorporate them into fisheries development and conservation strategies.

Integrate sustainable solutions that balance economic needs with ecological integrity.

Assist in the development and implementation of effective conservation or fisheries management plans and policies.

Program Learning Outcomes (PLOs)

BS (Zoology – Specialization in Fisheries)

The Fisheries specialization prepares students to meet their educational objectives by ensuring they demonstrate achievement of the following learning outcomes:

(Derived from recognized graduate attributes life and environmental science for sciences programs, adapted for fisheries science)

Academic Education

To prepare graduates as professionals in zoology and fisheries, capable of contributing to sustainable aquatic resource management.

Knowledge for Solving **Fisheries** Challenges Apply knowledge of fundamental biological sciences, ecology, fisheries science, and socio-economic principles to analyze and conceptualize sustainable models management for aquatic resources.

Problem Analysis

Identify, formulate, and research complex issues in aquatic ecosystems and fisheries; reach well-supported conclusions using scientific principles and community perspectives.

Design/Development of Solutions

Plan, adapt, and apply appropriate field and laboratory techniques, management strategies, and modern tools to address fisheries and aquatic biodiversity issues.

Individual and Team Work

Function effectively both independently and as a member or leader of diverse teams in multi-disciplinary and community settings.

Communication

Communicate effectively with local communities, industry stakeholders, policymakers, and the broader scientific community through reports, presentations, educational outreach, and clear instructions.

Fisheries Professionalism and Society

Understand and assess societal, health, cultural, economic, and environmental impacts within local and global contexts, and recognize the responsibilities associated with professional fisheries practice.

Ethics

Uphold professional ethics, environmental stewardship, and cultural sensitivities relevant to fisheries and aquatic sciences.

Life-long Learning

Recognize the need for and develop the ability to engage in independent learning for continued professional growth in fisheries and conservation fields

Facilities for the Zoology Department -Fisheries Specialization

Aquatic Biology & Fisheries Lab

The Fisheries laboratory supports students in conducting practical work, field sampling, and research for their final year projects and independent studies. This lab is equipped with instruments for water quality analysis, plankton identification, fish dissection and taxonomy, aquaculture water system simulations, and other tools for aquatic health and resource assessment. Students are encouraged to design and run practical experiments aligned with their project objectives.

Field Stations & Coastal Visits

Students gain hands-on experience through regular field trips to coastal waters, fish farms, hatcheries, inland water bodies, and local fishing communities, where they collect data, conduct stock assessments, and learn practical skills in real-world environments.

Admission Criteria

At least 50% marks in Intermediate (HSSC) examination with Pre-Medical or an equivalent qualification certified by IBCC.

OR an equivalent qualification in life sciences, certified by IBCC.

Deficiency

Students without a biology background may be required to complete a deficiency course in Biological Sciences of 3 credit hours during their first year.



Directorate of Students Affairs

Introduction

Since the University of Gwadar started its journey, keeping the need for grooming and personality development in view of students on campus, the Directorate of Student Affairs was established. The Office of Student Affairs establishes a liaison between the University administration and the student community. The Directorate of Students Affairs has its mission to offer a variety of services, programs, and activities to support and encourage the intellectual, personal, social, and cultural development of students. The Directorate provides all necessary arrangements starting from the first admission inquiry to the last day at the Campus. This Directorate also encourages

and endorses extra-curricular activities among students. It provides students with different opportunities to take part in sports/drama. It also provides them with different platforms for the development of their literary and artistic potential. The purpose of all such activities is to provide students with a conducive environment during their academic years in the university. This office functions as a friend and guide for students and is proving a bridge between administration and students to address their genuine problems. This office also holds the responsibility to maintain discipline and conduct in the university. Arranging workshops/ seminars is another important responsibility of the office. So far several student

societies and clubs have been registered and performing different tasks. The DSA office is also involved in checking the political or unlawful activities of the students. The office also conveys the student's problems to higher administration to facilitate the students. The Office not only concentrates on curricular and co-curricular but is also profoundly concerned with the career-building and financial assistance of the students.









MR. MUHAMMAD FAROOQ (Act) Director Student Affair







BADRIA



Quality Enhancement Cell

Introduction



The Quality Enhancement Cell (QEC) at the University of Gwadar was established in 2017 to enhance the quality of teaching and learning across various programs of the university. It works to improve the overall quality of education by identifying areas that need development and promoting better learning experiences. The QEC encourages collaboration among teachers, staff, and students to share ideas, adopt best practices, and explore innovative approaches to make teaching and learning more effective. The cell at University of Gwadar operates under the guidelines of the Quality Assurance Agency of the Higher Education Commission (QAA-HEC) Pakistan, and it also ensures that its efforts align with national quality standards.

Since its establishment, the QEC has made significant progress, with all its initiatives carefully documented and regularly reviewed to ensure continuous improvement.

Vision

To establish the University of Gwadar as a quality-conscious higher education institution that adheres to HEC's protocols and international quality standards.

Mission

To support academic departments and administration in setting and maintaining quality standards aligned with HEC guidelines and global trends. The QEC seeks to ensure compliance, foster creativity, and deliver quality education that promotes innovation and growth.

Functions of Quality Enhancement Cell

As per HEC, the key functions of the QEC include:

- 1. Reporting directly to the Vice-Chancellor and serving as a liaison with external bodies.
- 2. Enhancing public confidence in the quality and standards of degree awards.

3. Conducting regular progress review meetings to assess performance and address challenges, successes, and best practices.

- 4. Managing academic affiliations to maintain standards and program quality.
- 5. Defining clear standards as benchmarks for evaluations and guiding employees on expectations.
- 6. Applying the Pakistan Qualification Framework for curriculum development.

7. Setting annual targets in collaboration with the institution, based on revised criteria of QAA-HEC, to align with overall quality enhancement goals.

8. Implementing quality assurance measures across the institution to improve teaching, learning, and academic programs.

9. Monitoring and evaluating the effectiveness of quality enhancement initiatives to ensure alignment with institutional goals.

Achievements

2.

1. Three Program Self-Assessment Reports (SARs) have been completed so far.

Online Teacher and Course Evaluations are conducted in all seven departments.

UG Workshop on Examination and Quality Enhancement for Faculty







Office for Research, Innovation & Commercialization

Introduction

The Office of Research, Innovation and Commercialization was established at the University of Gwadar, beginning under the Higher Education Commission's guidelines. The Office of Research, Innovation, and Commercialization (ORIC) aim to support and organize research and commercialization activities at the University. We work hard to create a culture, infrastructure, and atmosphere that motivates and supports our employees in their pursuit of research and related endeavors.

Mission

Our mission is to promote and strengthen the research culture and welfare activities for academics, industry, and society by encouraging and accelerating the process of knowledge generation.

Vision

To engage the people with high quality research activities that can bring a positive impact on the society.

Objectives

- * To Support the strategic research plans and directions of the university
- * To strengthen the relationship of the university with the industry
- * To increase the external research funding sources
- * To promote multidisciplinary research activities
- To integrate the research activities with the educational activities at different levels of the university
- To promote entrepreneurship, and commercialization activities that energize and support the economy of the society at local and national level.





Directorate of Public Relations



Introduction

The Directorate of Public Relations (DPR) at the University of Gwadar serves as the dynamic link between the institution and its diverse audiences, including students, faculty, alumni, stakeholders, and the community at large. Committed to fostering a positive and impactful image of the university, the DPR is pivotal in ensuring transparent and effective communication of the university's vision, achievements, and ongoing developments. In 2024, the Directorate of Public Relations played a key role in amplifying the University of Gwadar's milestones, such as the successful inauguration of Academic Block-1, launching innovative academic programs, and enhancing youth engagement initiatives. The DPR also facilitated widespread awareness of research breakthroughs, community outreach programs, and cultural and educational events, reinforcing the university's status as a hub of excellence in higher education in the region.

Core Responsibilities

The DPR's primary responsibilities include:

1. Media Relations: Collaborating with media outlets to share news and updates about the university's achievements and initiatives.

2. Content Development: Produced press releases, newsletters, brochures, and digital content to promote the university's activities and programs.

3. Event Management: Planning and executing events such as seminars, conferences, and cultural programs, ensuring broad visibility and participation.

Digital Engagement: Managing the university's website and social media platforms to maintain an active and engaging online presence.

Achievements

This year, the DPR has significantly contributed to:

- Enhancing the university's public profile through consistent media engagement and positive press coverage.
- Strengthening alumni relations through collaborative events and publications.
- Promoting academic excellence by showcasing faculty and student achievements.



Mr. Naseer Muhammad

Public Relation Team





4.

ning alumni relations g academic excellence by s

Financial Aid Office

Office The of Financial Aid and Scholarships has been established to support underprivileged and talented students in the region. Mr. Ubaid Ali, a Lecturer in the Department of Management Sciences, currently serves as the Director of Financial



Aid and Scholarships at the University of Gwadar.

In 2024, this office facilitated numerous scholarship opportunities for students. Notable achievements include: Sahil Welfare Association: Awarded 55 scholarships exclusively to female students.

Chinese Consulate General Scholarship: Benefited 21 students. Chinese Ambassador Scholarship: Provided financial assistance to 35 students. Additionally, 100 students were supported through various scholarships, including: Balochistan Education Endowment Fund (BEEF) Punjab Education Endowment Fund (PEEF) for Balochistan's coastal region HEC Balochistan-FATA Undergraduate Scholarship Other national and regional programs In total, approximately 200 undergraduate students received financial assistance through these scholarship programs during the year, enabling them to pursue their education and achieve their academic aspirations.



Library

Introduction

Besides three independent libraries of the three blocks, constituent block II, Block III, and PCT&VI, the University of Gwadar has a central library, which is situated in the university's main block. It was established in 2017 as 'The University of Turbat Gwadar Campus Library'. The University of Turbat Gwadar Campus was raised to the status of a university in 2021.

The Central Library provides services that are professionally operated promotion of talent development, the stimulation of thought, educational and recreational needs of the minds as well as the academic requirements of the students. Library services will be a central facilitator for educational, recreational, and information needs. UG central library has 20,000+ books. The Central Library is equipped with all the necessary tools, a better atmosphere, and other services, etc. the study hall is facilitated with a seating capacity of 50 Library users during the maximum hours of operation.



Librarian/Computer Operator



Hostel

Introduction

The University of Gwadar caters to students almost from all over Pakistan. The university provides hostel facilities to most of the out-stationed boys and girls. There are a total of 2 hostels, out of which 1 for boys and 1 for girls. Approximately 80+ of students stay in these hostels. To supervise hostels, there are male and female provosts who are overall responsible for the allocation of rooms in the

hostel. The provosts are usually senior faculty members of the University. An assistant staff supports them in managing the allocation of hostels to the students and repairing these from time to time. They attach their residences to the respective hostels to facilitate the students and address any problems and issues as they arise.





OUR TESTIMONIAL



MS. SANJI HUSSAIN B.Ed Hons-2021

It's an honor to speak as an alumnus of the University of Gwadar. My time here was transformative, filled with learning, growth, and lasting memories.

This university was more than a place of education—it shaped who we are through inspiring faculty, friendships, and invaluable experiences. To graduates, let's carry the spirit of exploration forward. To students, cherish this journey—it defines you.

Thank you, University of Gwadar, for being the foundation of our dreams. Congratulations, graduates—our journey begins!



MR. ZUBAIR AHMED Commerce-2021

My time at the University of Gwadar's Commerce Department has been transformative. This remarkable institution provided me with invaluable knowledge and the confidence to tackle real-world challenges. The supportive faculty and diverse curriculum helped me recognize my strengths and shaped my perspective.

To anyone considering the University of Gwadar, I highly recommend it. The opportunities here will enhance your education and prepare you for success. I am deeply grateful for the support and lessons that will guide me in my future endeavors.



MR. ABDUL AZIZ BS.IT 2018

I'm Abdul Aziz, an IT graduate from Gwadar University. My time at UoG provided a solid foundation in Information Technology, shaping me both educationally and morally, and equipping me with the skills to pursue my career.

After graduation, I began as a Digiskills.pk coach, where I shared knowledge and developed a passion for education. Later, I joined Indus Hospital as a System and Network Administrator, applying my expertise to manage its IT infrastructure effectively.

I'm deeply grateful to the University of Gwadar for shaping my journey. The knowledge and skills I gained there have been instrumental in my success, and I'm proud to call myself an alumnus of this remarkable institution.



MR. NIZAM BALOCH BBA 2018

I am Nizam Baloch, a proud BBA graduate from the University of Turbat. My time at UoT shaped my goals, refined my skills, and strengthened my character. Applying the knowledge I gained, I successfully improved my ancestral business and gained the confidence to compete with top professionals.

Today, I serve as a Finance Officer at Indus Hospital and Health Network. UoT was instrumental in shaping my future, and I believe it can do the same for others who seize the opportunity.

DISCLAIMER

The University of Gwadar makes all reasonable efforts to offer the academic program and other services and facilities specified in this prospectus in the way they were described at the time of printing. However, the University reserves the right to make modifications deem as necessary.

The University also has the right to adjust admissions standards, course scheduling, degree requirements, and other student restrictions. These rules apply to all students, existing and incoming, and are decided by University policy. In case of discrepancy between the prospectus and the institution's policies or program are resolved by university judgement. The prospectus is not part of any contract between the University and individual.

Prospectus Editurial Board

Editor-In-Chief: Prof. Dr. Abdul Razzaq Sabir (TI) Editor: Prof. Dr. Syed Manzoor Ahmed Associate Editor: Mr. Naseer Ahmed Graphic Designer & Layout: Mr. Ghulam Sarwar Photographer: Mr. Nasrullah

For further information & updates, please contact or visit website:

The admission office, University of Gwadar, Balochistan

Gwadar-91200, Balochistan, Pakistan. Tel: (086) 4411380, Fax: (086) 4411380, Email: admissions@ug.edu.pk

https://www.facebook.com/uogwd https://twitter.com/uniofgwd https://www.ug.edu.pk https://www.instagram/uniofgwd

Published and Issued By

University of Gwadar, Gwadar Balochistan

Location

HOW TO GET TO UNIVERSITY OF GWADAR

From Gwadar city, follow the Jinnah Avenue till you reach at roundabout of GDA mosque, turn left and follow Pishukan Avenue. On two minutes drive there is another roundabout near Allama Iqbal Open University, then turn right, Gwadar University is in right at one minutes drive.





PROSPECTUS 24-2025

👤 Sarawan Avenue, New Town Phase IV, Gwadar, Balochistan

+92-864-411222

🔀 Info@ug.edu.pk



🚽 @uogwd

🔘 @uniofgwd

www.ug.edu.pk