

**PROSPECTUS 2025-26**



**GRAND ASIAN  
UNIVERSITY, SIALKOT**

A Chartered University

*I am The Future*



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

## MESSAGE FROM THE CHAIRMAN



It is with immense pride and great pleasure that I welcome you to the Grand Asian University Sialkot (GAUS). The remarkable journey of the Islam Group, rooted in a steadfast commitment to quality education, has led to the creation of *Islam Education City*—a hub of intellectual excellence. Over the years, a number of prestigious institutions have been established, including *Islam Medical & Dental College*, *Islam College of Pharmacy*, *Grand College of Pharmacy*, *Islam College of Physiotherapy*, *Islam College of Nursing*, *Islam Law College*, and *Islam College of Management & Sciences*. These institutions have proved the beacon to lay down the foundation of academic distinction, shaping professionals who contribute significantly to society.

This beacon then nurtured our vision to establish the *Grand Asian University Sialkot (GAUS)*, a great land mark to achieve excellence to render higher education and serve humanity. As a premier institution, GAUS is not merely

an academic institution, but a vibrant ecosystem where knowledge meets innovation, and tradition is harmonized with futuristic thinking. Our mission is to cultivate not just academic achievers, but global leaders who possess the critical thinking, creativity, and ethical grounding required to navigate an ever-evolving world.

At GAUS, we believe that education is not just about acquiring knowledge but about developing the whole individual. Our curricula have been designed to foster intellectual curiosity, leadership, and innovation, ensuring that students are equipped with the skills to excel in a dynamic global landscape. From cutting-edge research opportunities to transformative learning experiences, we provide an environment that encourages students to challenge the status quo, think beyond conventional boundaries, and aspire to greatness.

By holding an unwavering ambition, we at GAUS empower our students to stand shoulder to shoulder with the brightest minds in the world. Our graduates will not only be able to hold their presence in the international arena but will also set new standards of excellence.

With state-of-the-art facilities, an inspiring faculty, and a forward-thinking approach, GAUS stands at the forefront of higher education in the region. We are dedicated to provide a transformative educational experience that not only fosters intellectual excellence but also shapes character and purpose.

I invite you to embark on this extraordinary journey with us. At GAUS, we are committed to help you shape your future with boldness, vision and determination. Together, let us craft a future where your success knows no bounds. Your aspirations, combined with our expertise, will create a legacy of excellence.

### **Muhammad Islam**

Chairman Board of Governors  
Grand Asian University, Sialkot

## MESSAGE FROM THE VICE CHANCELLOR

It is with immense pleasure that I extend my warmest welcome to you all at Grand Asian University Sialkot (GAUS). Our university stands as a beacon of higher education, dedicated to fostering an environment where learning, discovery, and innovation converge to shape the leaders of tomorrow.

At GAUS, we believe that a university is not just a place to earn a degree, but a dynamic platform for personal and professional growth. Our commitment is to provide an enriching academic experience that prepares our students to meet the challenges of an increasingly interconnected and complex world. With a strong emphasis on interdisciplinary learning, global perspectives, and research-driven innovation, GAUS empowers students to develop not only their knowledge but also the critical skills necessary to succeed in today's rapidly evolving job markets.

We are deeply proud of our diverse and distinguished faculty who are passionate about nurturing talent and guiding students to realize their full potential. Their dedication to research and academic excellence ensures that GAUS remains at the cutting edge of education in Pakistan and beyond. Our modern facilities, vibrant campus life, and wide array of programs create a stimulating environment where ideas flourish and futures are shaped.

As Vice Chancellor, I am committed to furthering our vision of becoming a globally recognized institution that not only will impart knowledge but also cultivate integrity, leadership, and social responsibility. Together, we will continue to pursue academic excellence and innovation, ensuring that GAUS remains a trailblazer in higher education.

I look forward to seeing each of you achieve your dreams and contribute positively to society. Let us embark on this remarkable journey together.

### **Prof. Dr. Syed Mujahid Kamran**

Vice Chancellor, Grand Asian University, Sialkot

Sitara-e-Imtiaz

Pride of Performance

Abdus Salam Prize





## MESSAGE FROM SENIOR DIRECTOR



Welcome to Grand Asian University, Sialkot! It is with great pride and enthusiasm that I extend my warm greetings to all students of our esteemed institution. As we continue to build on the legacy of excellence, I am honored to be part of an academic community that is dedicated to shaping the leaders of tomorrow. At Grand Asian University, our mission is to provide an inclusive, stimulating, and dynamic learning environment that nurtures creativity, critical thinking, and innovation. We aim to equip our students with not only academic knowledge but also the practical skills needed to succeed in an ever-changing global landscape. Our commitment to fostering holistic development empowers students to excel not only in their chosen fields but also as responsible citizens of the world. Our highly qualified faculty, modern infrastructure, and diverse academic programs are designed to meet the evolving needs of the job market. We are committed to continuous research, innovation, and knowledge sharing, ensuring that our students are prepared to make a meaningful impact in their careers and communities. As an institution, we strive to create an environment where academic excellence, ethical values, and social responsibility come together. The success of our students is our highest priority, and we are deeply committed to supporting each individual in achieving their goals. Thank you for being a part of the Grand Asian University family. I am confident that together, we will continue to inspire, innovate, and lead with integrity. I look forward to witnessing your achievements and success.

**Dr. Tanveer Islam**

Senior Director  
Grand Asian University, Sialkot

## ACCREDITATIONS



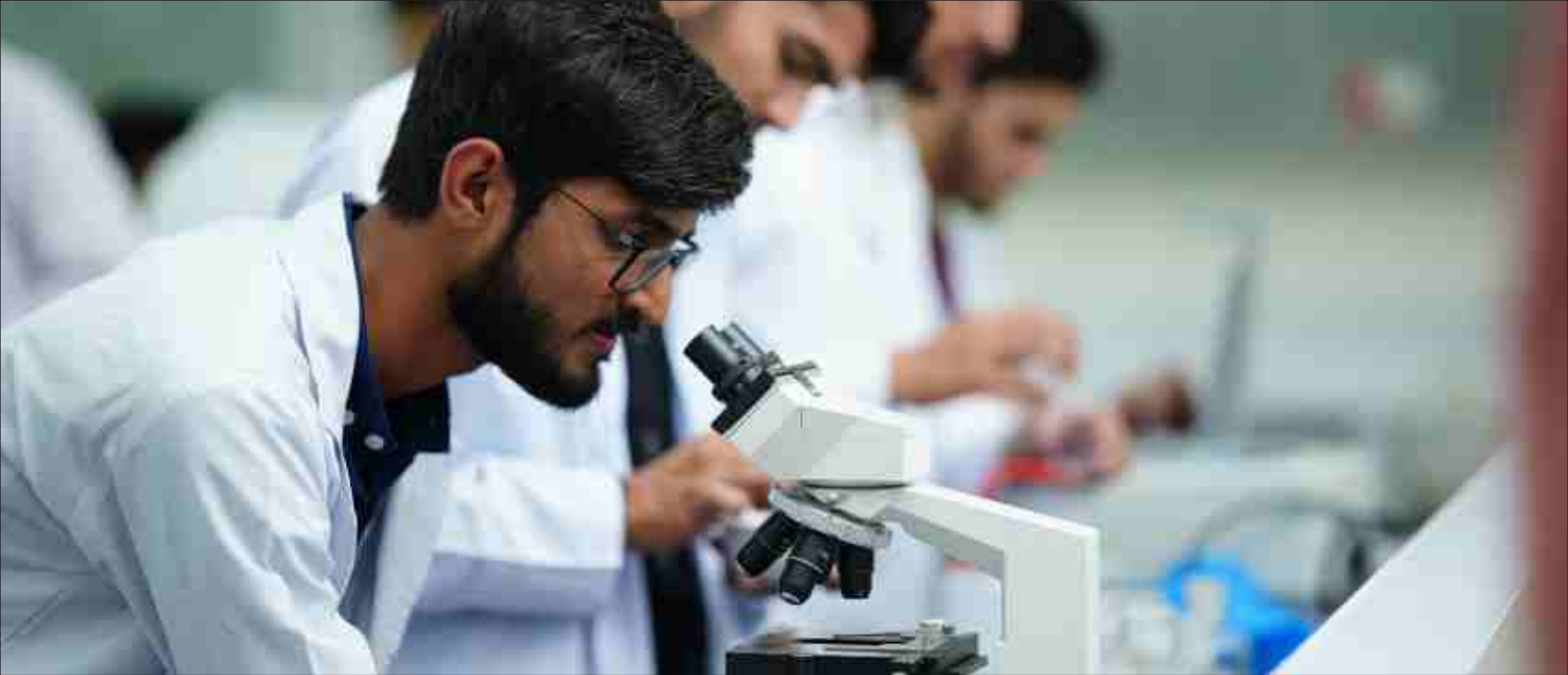
## INTERNATIONAL COLLABORATOR



**AZERBAIJAN UNIVERSITY**

## MOUs





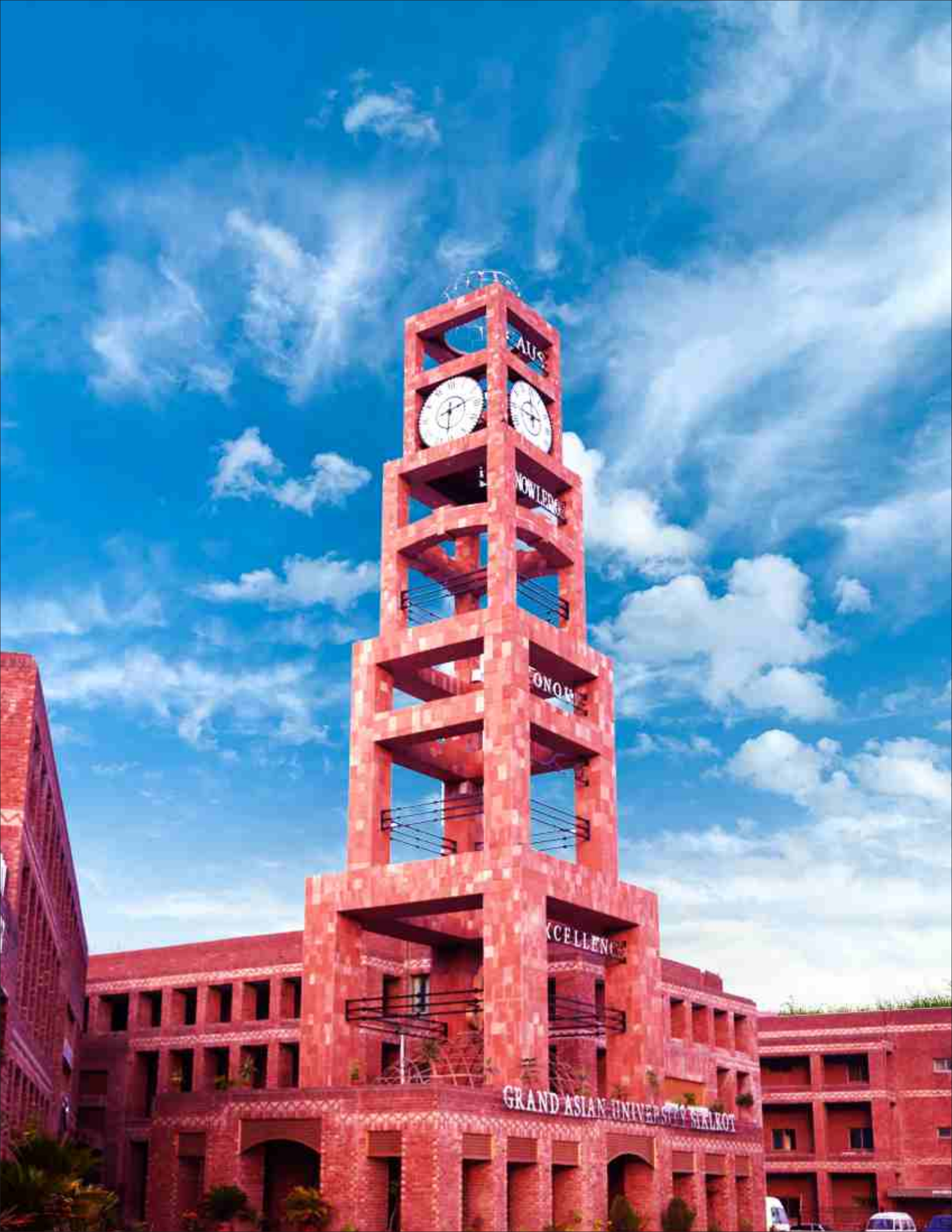
## TABLE OF CONTENTS

<b>About the University</b>		
1.	History and Overview	01
2.	Vision, Mission, Core Values	02
3.	Motto & Core Values	03
4.	University Governance	04
<b>Academics</b>		
5.	Faculty of Sciences	07
6.	• Department of Biosciences	09
7.	• Department of Food, Nutrition & Agricultural Sciences	22
8.	• Department of Physics	30
9.	• Department of Chemistry	35
10.	• Department of Mathematics	43
11.	• Department of Social Sciences	51
12.	• Department of Computer Sciences	58
13.	• Department of Business & Economics	73
14.	Faculty of Engineering and Technology	86
15.	• Department of Mechanical Engineering and Technology	88
16.	• Department of Electrical Engineering and Technology	92
17.	• Department of Civil Engineering and Technology	98
18.	Faculty of Pharmacy	102
29.	Faculty of Law	107
<b>University Administration</b>		
20.	Registrar Office	114
21.	Controller Examination Office	115
22.	Treasurer Office	116
23.	ORIC Office of Research, Innovation & Commercialization	117
24.	Directorate of Academics	118
25.	QEC Quality Enhancement Cell	119
26.	Directorate of Student Affairs	120
27.	Directorate of Admissions	121
28.	Directorate of Human Resource	122
29.	IT Services Team	123
30.	IT Development Team	124



## TABLE OF CONTENTS

Admission Information		
31.	Admission Policy	126
32.	Entry Requirements	129
Campus Facilities		
33.	Free Transport	133
34.	Seminars, Workshops, and Conferences	134
35.	Student Hostels (Boys and Girls) Educational and Recreational Tours	135
36.	Computer, Engineering and Science Labs	136
37.	Library	137
Campus Life		
38.	Cafeteria and Second Cup Cafe	138
39.	Student Societies	139
40.	Events and Extracurricular Activities	140
Memorandum Of Understandings		
41.	International Collaboration	147
42.	National Organizations	148
Career Services		
43.	Internship and Placement Services Student Counseling and Career Guidance	151
Student Support Services		
44.	Business Incubation Center Campus Market Medical Services	153
Code of Conduct		
45.	Code of Conduct	155
46.	Anti-Ragging Policy Attendance Policy	156
47.	Harassment Policy	157
48.	Contact Us!	159
49.	Appendices	160



GRAND ASIAN UNIVERSITY SURABAYA

EXCELLENCE

HONOR

KNOWLEDGE

AUS

# ABOUT THE UNIVERSITY

## History and Overview

The Islam Group has a **distinguished heritage in education**, with over a decade of dedicated service to **nurturing young minds and advancing academic standards**. Through this unwavering commitment, the group has established itself as a pioneer in the education sector. In 2021, this commitment reached a new pinnacle with the launch of Grand Asian University Sialkot (GAUS). The university, a fully chartered institution under the Act of 2021 by the Government of Punjab, Lahore, is duly **recognized by the Higher Education Commission (HEC)** Islamabad. GAUS stands as a beacon of modern education, rooted in tradition yet embracing the innovations necessary for future success, and has quickly become a leading institution in the Sialkot region.

Strategically located on Pasrur Road, Sialkot, GAUS spans an impressive 10-acre campus with a developed **area of 324,517 sq. ft.** The campus is a testament to modern architecture and cutting-edge infrastructure, designed to foster a vibrant academic environment. Students benefit from access to advanced laboratories equipped with the latest technology, a modern digital library that offers vast academic resources, and an array of facilities tailored to enhance the overall learning experience. GAUS, as a multidisciplinary institution, offers a broad spectrum of career-oriented, cutting-edge programs across both undergraduate and postgraduate levels. These programs span diverse disciplines, ensuring that students are equipped with the knowledge and skills necessary to excel in today's fast-evolving global landscape.

Currently, GAUS is home to more than **3,500 students**, a testament to its rapid growth and strong reputation. The university is proud to have over **250 dedicated faculty members**, including a significant number of **PhD-qualified professors** who contribute to both teaching and research. These faculty members are one of the institution's greatest assets, driving forward a culture of academic excellence and innovation. The university continuously strives to strengthen its academic and research programs by adopting unique, progressive, and innovative practices. Through these efforts, GAUS remains at the forefront of **educational innovation, consistently redefining and raising** the standards of academic excellence.



## VISION

Be a regional leader in producing the intellectual human resource in contemporary disciplines and to positively contribute in the educational and economic development of local and global communities to meet multidirectional challenges

## MISSION

To create a transformative educational environment to foster the cutting-edge knowledge, innovation and nurturing integrity in students by engaging specialized resources and aligning activities to achieve Sustainable Development Goals (SDGs)





## MOTTO

A motto is a short expression or combination of motivating words that describes a guiding principle of an organization. Mottos help institutions express what's important to them and how they want to do business. In branding, mottos are used as front-facing elements that capture and communicate a company's values. The following Motto has been given by the Chairman BOG for adoption at Grand Asian University Sialkot:

 **Knowledge**  **Excellence**  **Honour**

## CORE VALUES

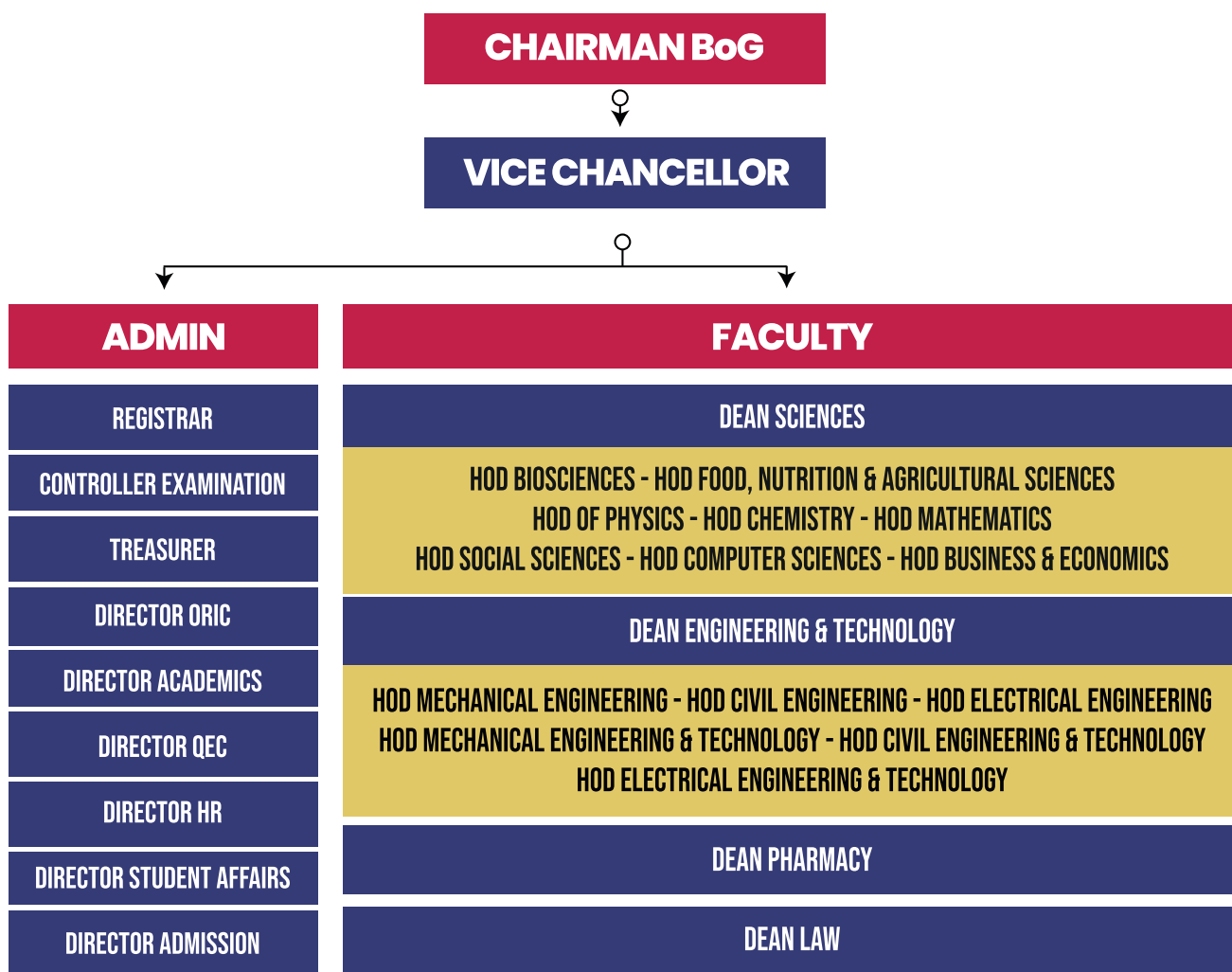
Core values are the guiding principles because they form a solid core of who we are, what we believe, and want to be going forward. The following Core Values have been proposed for adoption at Grand Asian University Sialkot: We value:

<b>GAUS:</b>	An Arabic word means promoter of justice
<b>Innovation:</b>	Promoting research culture and creative thinking
<b>Integrity:</b>	Promoting self, institutional and national integrity
<b>Diversity:</b>	Promoting multi-cultural norms to strengthen society
<b>Talent:</b>	Promoting professional teaching and academic staff
<b>Teamwork:</b>	Promoting harmony and cooperative culture
<b>Loyalty:</b>	Promoting long term organizational relationship
<b>Respect:</b>	Promoting dignity and love for others
<b>Honesty:</b>	Promoting morality in employees and students
<b>Competency:</b>	Valuing competent human resource

# UNIVERSITY GOVERNANCE

The good governance of any academic institution depends on the formal constitution and working of the authorities. In accordance with the Section 17, of GAUS Act, 2021, following organogram shows the Authorities of the University. Moreover, the GAUS governance relies upon the Statutes, Regulations, Policies and SOPs are properly prepared and followed/ implemented in true letter and spirit. One of the important aspect of this governance is the provision of Vision & Mission to lead all the stakeholders to the right direction and ultimate growth of the institute.

## ORGANOGRAM







# ACADEMICS

## Faculties & Departments



## FACULTY OF SCIENCES

### Message From The Dean

I welcome all the new students who have taken admission in the Faculty of Sciences, Grand Asian University Sialkot. The Faculty of Sciences was established in 2023 after accreditation by HEC. Faculty of Sciences comprised of 8 Departments as Biosciences, Food Nutrition and Agricultural Sciences, Physics, Mathematics, Chemistry, Social Sciences, Computer Science, Software Engineering and IT, Management Science and Economics

Faculty of Sciences comprised of highly trained and experienced academia and well equipped laboratories. Along with its own, this faculty is catering to fulfill demand of other faculties in undergraduate and post-graduate teaching. Faculty is involved in active research collaborations within and among other faculties and with other National and International institutions. Faculty of Sciences currently is offering different degree programs entitled as ADP, BS, MS/MPhil and PhD.

The Dean Office monitors, assesses, investigates, and responds to new and evolving needs of individual students or student groups. In partnership with other directorates in the University and with the community at large, the office facilitates coordinated responses to immediate situations and develops proactive initiatives to prepare for future needs of the diverse student population. Our aim has always been to produce men and women of integrity, who should dedicate their capabilities for understanding and solving the National problems in general and the people residing in different areas of Punjab.



**Professor Dr. Muhammad Gulfraz**  
PhD, Post Doc



### **Mission**

The Faculty of Sciences is striving hard to provide state-of-the-art infrastructure and an interdisciplinary research environment premised through civil, public, and industrial collaboration embed with commitment, dedication and devotion among the prospective graduates to develop the profession acumen and responsibility to nurture entrepreneurship and further contribution in economic and social stability at regional and national levels in our country.

# FACULTY OF SCIENCES

## Department of Biosciences

### Introduction

Bioscience is among the pioneer departments established in this faculty. This is one of the major departments plays a crucial role to educate in various fields, including biotechnology, biochemistry, zoology, botany, pharmacology, medical lab and imaging technologies. Comprising of highly educated academic faculty, this department is putting all its efforts out to impart quality education, create future leaders with integrity, enlighten with social norms and capable of devising knowledge based economy to contribute to the economic uplift of this region and country.

### Objectives

The core objectives of this department are to:

- produce outstanding students with diverse academic and cultural background in various disciplines of sciences capable to compete at national and international level.
- improve quality of education on regular basis through impeccable curriculum development.
- improve well-being of human population by producing innovative research products to uplift living standards of community
- focus and build up the students personality along with their professional development for their successful career.

### Programs Being Offered

ADP Medical Lab Technology	BS Microbiology
ADP Imaging Technology	BS Botany
ADP Zoology	MS Biochemistry
BS Zoology	MS Biotechnology
BS Biochemistry	MS Pharmacology
BS Biotechnology	

## Message From HOD



It is with great pride and enthusiasm that I extend a warm welcome to all students and prospective scholars of the Department of Biosciences at Grand Asian University, Sialkot. Our department is dedicated to providing a high standard of education and fostering innovative research in the rapidly evolving field of biosciences. With a focus on academic excellence and a strong commitment to advancing scientific knowledge, we aim to equip our students with the tools necessary to contribute meaningfully to the world of science and healthcare.

The Department of Biosciences is renowned for its outstanding academic programs, which include undergraduate, graduate, and postgraduate degrees in fields such as Medical Laboratory and Imaging Technologies, Molecular Biology, Biotechnology, Microbiology, Biochemistry and Pharmacology. Our rigorous curriculum is designed to build a solid foundation in both theoretical concepts and practical laboratory skills. Our team of experienced and highly qualified faculty members guides students not only through their course work but also in research projects that explore cutting-edge topics such as genetic engineering, microbial technology, and environmental sustainability.

Research and development form the backbone of our department, and we continuously strive to expand our research capacity and contribute to global scientific advancements. Our students have access to state-of-the-art laboratories and facilities, enabling them to engage in hands-on learning and practical applications.

As the Head of the Department, leading and proud to shape the shape the future of biosciences, contributing to scientific progress, and addressing the pressing challenges of our time. I look forward to seeing all of you achieve greatness in this exciting and dynamic field. We are here to get you all the current and new students to embark after getting admission in the fields mentioned above and march together to achieve the excellence in education and thereby to become the most functional graduates in society at large.

**Prof. Dr. Sajid Mahmood**

Project Director, GAUS

PhD Biochemistry



## ADP Medical Lab Technology

**Teaching Faculty**  
**Ms. Komal Shoukat (Lecturer)**  
**Ms. Hamna Waris (Lab demonstrator)**

### Program Summary

Admission                      Fall & Spring  
 Duration                        2 Years  
 Total Semesters               4  
 Total Credit Hours            66

### Career Prospects

- Clinical biochemists
- Establishment of clinical laboratories
- Academia, biotechnologists, molecular biologists.

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
HIS -501	Introduction to History	2(2-0)
PSY -500	Introduction to Psychology	2(2-0)
ENG -501	Functional English	3(3-0)
QRE -501	Quantitative Reasoning I	3(3-0)
ISL -501	Islamic Studies	2(2,0)
BIO -501	Fundamentals of Biology	2(2-0)
BIO -501 -P	Fundamentals of Biology Lab	1(0-1)

### Semester 2

Course Code	Course Title	Credit Hour
ENG -502	English II (Expository Writing)	3(3-0)
QRE -502	Quantitative Reasoning II	2(2-0)
ICP -501	Ideology and Constitution of Pakistan	2(2-0)
ICT -501	Applications of Information and Communication Technologies	2(2-0)
1CT -501 -P	Applications of Information and Communication Technologies Lab	1(0-1)
BCH -501	Introductory Biochemistry	2(2-0)
BCH -501 -P	Introductory Biochemistry Lab	1(0-1)
MLT -501	Human Physiology	3(3-0)

### Semester 3

Course Code	Course Title	Credit Hour
ENT -501	Entrepreneurship	2(2-0)
CCE -501	Civics and Community Engagement	2(2-0)
MLT -501	Human Anatomy -I	2(2-0)
MLT -501 -P	Human Anatomy -I Lab	1(0-1)
MLT -502	General Microbiology	2(2-0)
MLT -502 -P	General Microbiology Lab	1(0-1)
MLT -503	Clinical Hematology	2(2-0)
MLT -503 -P	Clinical Hematology Lab	1(0-1)
MLT -504	Introductory Pharmacology	2(2-0)
MLT -504 -P	Introductory Pharmacology Lab	1(0-1)
MLT -505 -P	Basic Lab Principles, Lab Safety and First Aid Lab-I	1(0-1)
MLT -506	Blood Banking	1(1-0)

### Semester 4

Course Code	Course Title	Credit Hour
MLT -507	Medical laboratory instrumentation and analytical techniques	2(2-0)
MLT -507 -P	Medical laboratory instrumentation and analytical techniques Lab	1(0-1)
MLT -508	Histopathology and Histotechnology -I	2(2-0)
MLT -508 -P	Histopathology and Histotechnology -I Lab	1(0-1)
BCH -606	Molecular Biology	2(2-0)
BCH -606 -P	Molecular Biology Lab	1(0-1)
BCH -614	Clinical Biochemistry	2(2-0)
BCH -614 -P	Clinical Biochemistry Lab	1(0-1)
MLT -509	Chemical Pathology -I	2(2-0)
MLT -509 -P	Chemical Pathology -I Lab	1(0-1)
MLT -698	Clinical Lab Practice -I/Internship	3(3-0)
THQ -501	Teaching of Holy Quran	Non Credit
Total Credit Hours		68

## ADP Imaging Technology

**Teaching Faculty**  
**Prof. Dr. Sajid Mehmood**  
 (Professor & HOD)  
**Ms. Hamna Waris**(Lab demonstrator)

### Program summary

Admission            Fall & Spring  
 Duration             2 Years  
 Total Semesters     4  
 Total Credit Hours   66

### Career Prospects

- Establishment of ultra sound and other radio-graphical facilities
- Academia and technical expertise in various hospitals and poly clinics

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
HIS -501	Introduction to History	2(2-0)
PSY -500	Introduction to Psychology	2(2-0)
ENG -501	Functional English	3(3-0)
QRE -501	Quantitative Reasoning I	3(3-0)
ISL -501	Islamic Studies	2(2,0)
BIO -501	Fundamentals of Biology	2(2-0)
BIO -501 -P	Fundamentals of Biology Lab	1(0-1)

### Semester 2

Course Code	Course Title	Credit Hour
ENG -502	English II (Expository Writing)	3(3-0)
QRE -502	Quantitative Reasoning II	2(2-0)
ICP -501	Ideology and Constitution of Pakistan	2(2-0)
ICT -501	Applications of Information and Communication Technologies	2(2-0)
ICT-501-P	Applications of Information and Communication Technologies Lab	1(0-1)
IMT -501	Introductory Biochemistry	2(2-0)
IMT -501-P	Introductory Biochemistry Lab	1(0-1)
IMT -502	Human Physiology	3(3-0)

### Semester 3

Course Code	Course Title	Credit Hour
ENT -501	Entrepreneurship	2(2-0)
CCE -501	Civics and Community Engagement	2(2-0)
MLT -501	Human Anatomy -I	2(2-0)
MLT -501 -P	Human Anatomy -I Lab	1(0-1)
IMT -503	Magnetic Resonance Imaging (MRI)	2(2-0)
IMT -503-P	Magnetic Resonance Imaging (MRI) - Lab	1(0-1)
IMT -504	Embryology	2(2-0)
IMT -504-P	Embryology Lab	1(0-1)
IMT -505	Introductory Pharmacology	2(2-0)
IMT -505-P	Introductory Pharmacology Lab	1(0-1)
MLT -506	Basic Lab Principles, Lab Safety and First Aid Lab-I	1(0-1)
IMT -507	Blood Banking	1(1-0)

### Semester 4

Course Code	Course Title	Credit Hour
IMT -508	General Radiology	2(2-0)
IMT -508-P	General Radiology Lab	1(0-1)
IMT -509	Radiation Sciences and Technology	3(3-0)
IMT -510	Medical Imaging Physics and Instrumentation	2(2-0)
IMT -510-P	Medical Imaging Physics and Instrumentation Lab	1(0-1)
IMT -511	Abdominal & Gynecological Ultrasound	2(2-0)
IMT -511-P	Abdominal & Gynecological Ultrasound Lab	1(0-1)
IMT -512	Computed Tomography and Clinical Practice	2(2-0)
IMT -512-P	Computed Tomography and Clinical Practice Lab	1(0-1)
IMT -698	Clinical Lab Practice-I/Internship-I	3(3-0)
THQ -501	Teaching of Holy Quran	Non Credit
Total Credit Hours		68

## BS Biochemistry

### Teaching Faculty

Prof. Dr. Muhammad Gulfraz (Professor & Dean)  
 Prof. Dr. Sajid Mehmood (Professor & HOD)  
 Prof. Dr. Syed Muhammad Nurulain (Professor)  
 Dr. Nimrah Khalid (Assistant Professor)

### Program summary

Admission                      Fall & Spring  
 Duration                        4 Years  
 Total Semesters                8  
 Total Credit Hours              135

### Career Prospects

Biochemistry offers diverse career paths in healthcare, research, industry, and education:

- Clinical biochemists, pharmaceutical researchers, forensic scientists, and genetic counselors.
- Academia, biotechnologists, molecular biologists.
- Agricultural biochemists, environmental biochemists, and toxicologists.
- Biochemical engineers and quality control analysts.
- Regulatory affairs specialists and public health officers.

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
HIS-502	Introduction to History	2(2-0)
BCH-501	Introductory Biochemistry	2(2-0)
BCH-501-P	Introductory Biochemistry Lab	1(0-1)
PSY-500	Introduction to Psychology	2(2-0)
ENG-501	Functional English	3(3-0)
QRE-501	Quantitative Reasoning I	3(3-0)
ISL-501	Islamic Studies	2(2-0)

### Semester 3

Course Code	Course Title	Credit Hour
CHEM-501	Inorganic Chemistry	2(2-0)
ECO-501	Fundamentals of Ecology	2(2-0)
ECO-501-P	Fundamentals of Ecology Lab	1(0-1)
ZOO-503	Cell Biology	2(2-0)
ZOO-503-P	Cell Biology Lab	1(0-1)
MIC-501	Microbiology	2(2-0)
MIC-501-P	Microbiology Lab	1(0-1)
BCH-506	Bio-membrane and Cell Signaling	2(2-0)
BCH-506-P	Bio-membrane and Cell Signaling Lab	1(0-1)
CCE-501	Civics and Community Engagement	2(2-0)
CCE-501-P	Civics and Community Engagement Lab	1(0-1)

### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3(3-0)
QRE-502	Quantitative Reasoning II	3(3-0)
ICP-501	Ideology and Constitution of Pakistan	2(2-0)
ICT-01	Applications of Information and Communication Technologies	2(2-0)
ICT-501-P	Applications of Information and Communication Technologies Lab	1(0-1)
BCH-502	Carbohydrates & Lipids	2(2-0)
BCH-502-P	Carbohydrates & Lipids Lab	1(0-1)
BCH-503	Amino acids & Proteins	2(2-0)
BCH-503-P	Amino acids & Proteins Lab	1(0-1)
THQ-501	Teaching of Holy Quran	Non Credit

### Semester 4

Course Code	Course Title	Credit Hour
ENT-501	Entrepreneurship	2(2-0)
CHEM-502	Organic Chemistry	2(2-0)
BCH-507	Immunology	2(2-0)
BCH-507-P	Immunology Lab	1(0-1)
BCH-508	Metabolism I	2(2-0)
BCH-508-P	Metabolism I Lab	1(0-1)
BCH-509	Enzymology	2(2-0)
BCH-509-P	Enzymology Lab	1(0-1)
ZOO-506	Fundamentals of Genetics	3(3-0)

## Semester 5

Course Code	Course Title	Credit Hour
CHEM -503	Physical Chemistry	2(2-0)
BCH -601	Integrated Metabolism	2(2-0)
BCH -601-P	Integrated Metabolism Lab	1(0-1)
BCH -602	Plant Biochemistry	2(2-0)
BCH -602-P	Plant Biochemistry Lab	1(0-1)
BCH -603	Current trends in Biochemistry	2(2-0)
BCH -603-P	Current trends in Biochemistry Lab	1(0-1)
BCH -604	Biochemical Techniques	2(2-0)
BCH -604-P	Biochemical Techniques Lab	1(0-1)

## Semester 7

Course Code	Course Title	Credit Hour
BCH-610	Introduction to Bioinformatics	3
BIO-601	Biosafety and Bioethics	2(2-0)
BIO-601-P	Biosafety and Bioethics Lab	1(0-1)
BCH-612	Research Planning and Report Writing	2(2-0)
BCH-612-P	Research Planning and Report Writing Lab	1(0-1)
BCH-613	Methods in Molecular Biology	2(2-0)
BCH-613-P	Methods in Molecular Biology Lab	1(0-1)
BCH-618	Molecular Genetics	3(3-0)
BCH-697	Internship/Field Experience	3(3-0)

## Semester 6

Course Code	Course Title	Credit Hour
BCH-605	Analytical Chemistry	2(2-0)
BCH-606	Molecular Biology	2(2-0)
BCH-606-P	Molecular Biology Lab	1(0-1)
BCH-607	Bioenergetics	2(2-0)
BCH-607-P	Bioenergetics Lab	1(0-1)
BCH-608	Nutritional Biochemistry	2(2-0)
BCH-608-P	Nutritional Biochemistry Lab	1(0-1)
BCH-609	Cell and Tissue Culture	2(2-0)
BCH-609-P	Cell and Tissue Culture Lab	1(0-1)

## Semester 8

Course Code	Course Title	Credit Hour
BCH-614	Clinical Biochemistry	2(2-0)
BCH-614-P	Clinical Biochemistry Lab	1(0-1)
BCH-615	Environmental Biochemistry	2(2-0)
BCH-615-P	Environmental Biochemistry Lab	1(0-1)
BCH-617	Pharmacology	2(2-0)
BCH-617-P	Pharmacology Lab	1(0-1)
BCH-698	Capstone Research Project	6(0-6)
Total Credit Hours		135

## MS Biochemistry

### Teaching Faculty

**Prof. Dr .Muhammad Gulfranz**

**(Professor & Dean)**

**Prof. Dr. Sajid Mehmood (Professor & HOD)**

**Dr. Nimrah Khalid (Assistant Professor)**

### Program summary

Admission Fall & Spring

Duration 2 Years

Total Semesters 4

Total Credit Hours 30

### Career Prospects

Biochemistry offers diverse career paths in healthcare, research, industry, and education:

- Clinical biochemists, pharmaceutical researchers, forensic scientists, and genetic counselors.
- Academia, biotechnologists, molecular biologists.
- Agricultural biochemists, environmental biochemists, and toxicologists.
- Biochemical engineers and quality control analysts.
- Regulatory affairs specialists and public health officers.

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
STAT -701	Biostatistics	3(3-0)
BCH -701	Research Methodology	3(3-0)
BTH -701	Advances in Analytical Techniques	3(3-0)
BCH -702	Advances in Molecular Biology	3(3-0)

### Semester 2

Course Code	Course Title	Credit Hour
BTH -704	Fermentation and Bioprocess Technology	3(3-0)
BCH -703	Advances in Biochemistry	3(3-0)
BCH -706	Advances in Clinical Biochemistry	3(3-0)
BCH -709	Special Problems	2(2-0)
BCH -710	Seminar	1(1-0)

### Semester 3&4

Course Code	Course Title	Credit Hour
BCH -708	Research and Thesis	6(6-0)
Total Credit Hours		30



## ADP and BS Zoology

**Teaching Faculty**  
**Ms. Sadia Asmat (Lecturer)**  
**Ms. Maliha Ijaz (Lecturer)**

### Program summary

Admission                      Fall & Spring  
 Duration                        2 & 4 Years  
 Total Semesters              4 & 8  
 Total Credit Hours          66 & 132

### Career Prospects

Zoology offers various career opportunities in fields related to animal science and conservation:

- Studying animal behavior, habitats, and ecosystems.
- Working to protect endangered species and natural environments.
- Caring for animals in zoos and wildlife parks.
- Researching marine species and ocean ecosystems.
- Analyzing animal behavior for research or welfare purposes.
- Studying ecosystems and biodiversity.
- Providing medical care for animals.
- Teaching and conducting research in zoology and advising on wildlife conservation

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
HIS-501	Introduction to History	2(2-0)
ZOO-501	Animal Diversity I	2(2-0)
ZOO-501-P	Animal Diversity-IIab	1(0-1)
PSY-501	Introduction to Psychology	2(2-0)
ENG-501	Functional English	3(3-0)
QRE-501	Quantitative Reasoning I	3(3-0)
ISL-501	Islamic Studies	2(2-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3(3-0)
QRE-502	Quantitative Reasoning II	3(3-0)
ICP-501	Ideology and Constitution of Pakistan	2(2-0)
ICT-501	Applications of Information and Communication Technologies	2(2-0)
ICT-501-P	Applications of Information and Communication Technologies Lab	1(0-1)
ZOO-502	Animal Diversity II	2(2-0)
ZOO-502-P	Animal Diversity II Lab	1(0-1)
ZOO-503	Cell Biology	2(2-0)
ZOO-503-P	Cell Biology Lab	1(0-1)

### Semester 3

Course Code	Course Title	Credit Hour
CHEM-501	Inorganic Chemistry	2(2-0)
CHEM-501-P	Inorganic Chemistry Lab	1(0-1)
ECO-501	Fundamentals of Ecology	2(2-0)
ECO-501-P	Fundamentals of Ecology Lab	1(0-1)
BCH-502	Carbohydrates and Lipids	2(2-0)
BCH-502-P	Carbohydrates and Lipids Lab	1(0-1)
ZOO-504	Form and Function I	2(2-0)
ZOO-504-P	Form and Function I Lab	1(0-1)
MIC-501	Introductory Microbiology	2(2-0)
MIC-501-P	Introductory Microbiology Lab	1(0-1)
CCE-501	Civics and community engagement	2(2-0)

### Semester 4

Course Code	Course Title	Credit Hour
CHEM-502	Organic Chemistry	2(2-0)
CHEM-502-P	Organic Chemistry Lab	1(0-1)
ZOO-505	Form and Function II	2(2-0)
ZOO-505-P	Form and Function II Lab	1(0-1)
BTH-501	Introduction to Biotechnology	2(2-0)
BTH-501-P	Introduction to Biotechnology Lab	1(0-1)
ZOO-506	Genetics	2(2-0)
ZOO-506-P	Genetics Lab	1(0-1)
BCH-606	Molecular Biology	2(2-0)
BCH-606-P	Molecular Biology Lab	1(0-1)
ENT-501	Entrepreneurship	2(2-0)
THQ-501	Teaching of Holy Quran	Non Credit
	<b>Total Credit Hours</b>	<b>66</b>

## Semester 5

Course Code	Course Title	Credit Hour
CHEM503	Physical Chemistry	2(2-0)
CHEM503-P	Physical Chemistry Lab	1(0-1)
ZOO-601	Animal Physiology	2(2-0)
ZOO-601-P	Animal Physiology Lab	1(0-1)
ZOO-602	Developmental Biology	2(2-0)
ZOO-602-P	Developmental Biology Lab	1(0-1)
ZOO-603	Wildlife	2(2-0)
ZOO-603-P	Wildlife Lab	1(0-1)
ZOO-604	Evolution	3(3-0)
BOT-501	Diversity of plants	2(2-0)
BOT-501-P	Diversity of plants Lab	1(0-1)

## Semester 6

Course Code	Course Title	Credit Hour
BOT-505	Plant Physiology	3(3-0)
ZOO-605	Animal Behavior	2(2-0)
ZOO-605-P	Animal Behavior Lab	1(0-1)
ZOO-606	Zoogeography and Paleontology	2(2-0)
ZOO-606-P	Zoogeography and Paleontology Lab	1(0-1)
ZOO-607	Bioinformatics	2(2-0)
ZOO-607-P	Bioinformatics Lab	1(0-1)
ZOO-696	Biological Techniques	2(2-0)
ZOO-696-P	Biological Techniques Lab	1(0-1)
ZOO-609	Immunology	2(2-0)
ZOO-609-P	Immunology Lab	1(0-1)

## Semester 7

Course Code	Course Title	Credit Hour
BIO-601	Biosafety and Bioethics	3(3-0)
ZOO-695	Synopsis and Research Methodology	3(3-0)
ZOO-610	Fisheries	2(2-0)
ZOO-610-P	Fisheries Lab	1(0-1)
ZOO-611	Entomology	2(2-0)
ZOO-611	Entomology Lab	1(0-1)
ZOO-697	Internship/Field Experience	3(0-3)

## Semester 8

Course Code	Course Title	Credit Hour
ZOO-612	Economic Zoology	2(2-0)
ZOO-612-P	Economic Zoology Lab	1(0-1)
ZOO-613	Parasitology	2(2-0)
ZOO-613-P	Parasitology Lab	1(0-1)
ZOO-614	Ichthyology	2(2-0)
ZOO-614-P	Ichthyology Lab	1(0-1)
ZOO-698	Capstone Research Project	6(0-6)
Total Credit Hours		132

# BS Biotechnology

### Teaching Faculty

**Dr. Muhammad Rashid (Assistant Professor)**

**Dr. Qudsia Firdous (Assistant Professor)**

**Dr. Waheed Ahmed Chatha**

**(Assistant Professor)**

**Mr. Waqas Ahmed (Lecturer)**

### Program Summary

Admission Fall & Spring

Duration 4 Years

Total Semesters 8

Total Credit Hours 126

### Career Prospects

Biotechnology offers a wide range of career opportunities across various sectors:

- Drug development, clinical research, and medical devices.
- Genetic modification, crop improvement, bioengineering of food products and sustainable farming technologies.
- Waste management, bioremediation, and renewable energy (biofuels).
- Production of enzymes, biofuels, and biodegradable materials.
- Genetic data analysis, gene editing, and personalized medicine.
- Ensuring compliance with industry standards in biotech companies.
- Teaching, academic research, biotech innovation and biotech startups.

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
HIS-501	Introduction to History	2(2-0)
BTH-501	Introduction to Biotechnology	2(2-0)
PSY-500	Introduction to Psychology	2(2-0)
ENG-501	English-I (Functional English)	3(3-0)
QRE-501	Quantitative Reasoning I	3(3-0)
ISL-501	Islamic Studies	2(2-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3(3-0)
QRE-502	Quantitative Reasoning II	3(3-0)
ICP-501	Ideology and Constitution of Pakistan	2(2-0)
ICT-501	Applications of Information and Communication Technologies	2(2-0)
ICT-501-P	Applications of Information and Communication Technologies Lab	1(0-1)
BTH-502	Cell Biology	2(2-0)
BTH-502-P	Cell Biology Lab	1(0-1)
BCH-501	Biochemistry-I	2(2-0)
BCH-501-P	Biochemistry-I Lab	1(0-1)

## Semester 3

Course Code	Course Title	Credit Hour
CHEM -501	Inorganic Chemistry	2(2-0)
CHEM -501-P	Inorganic Chemistry Lab	1(0-1)
ECO -501	Fundamentals of Ecology	2(2-0)
ECO-501 P	Fundamentals of Ecology Lab	1(0-1)
BTH -503	Analytical Techniques & Instrumentation	2(2-0)
BTH-503-P	Analytical Techniques & Instrumentation Lab	1(0-1)
MIC -501	Microbiology	2(2-0)
MIC -501 -P	Microbiology Lab	1(0-1)
CCE -501	Civics and Community Engagement	2(2-0)
BCH -502	Biochemistry -II	2(2-0)
BCH-502 P	Biochemistry -II Lab	1(0-1)
THQ -501	Teaching of Holy Quran	Non Credit

## Semester 4

Course Code	Course Title	Credit Hour
CHEM-502	Organic Chemistry	2(2-0)
CHEM-502-P	Organic Chemistry Lab	1(0-1)
ENT-501	Entrepreneurship	2(2-0)
BCH-606	Molecular Biology	2(2-0)
BCH-606-P	Molecular Biology Lab	1(0-1)
BTH-504	Nano Biotechnology	3(3-0)
BTH-505	Enzymology	2(2-0)
BTH-505-P	Enzymology Lab	1(0-1)
ZOO-506	Genetics	2(2-0)

## Semester 5

Course Code	Course Title	Credit Hour
CHEM-504	Analytical Chemistry	2(2-0)
CHEM-504-P	Analytical Chemistry Lab	1(0-1)
ZOO-609	Immunology	2(2-0)
ZOO-609-P	Immunology Lab	1(0-1)
BTH-615	Genetic Resources and Conservation	3(3-0)
BTH-601	Microbial Biotechnology	2(2-0)
BTH-601-P	Microbial Biotechnology Lab	1(0-1)
BTH-616	Molecular diagnosis	2(2-0)
BTH-616-P	Molecular diagnosis Lab	1(0-1)

## Semester 6

Course Code	Course Title	Credit Hour
BCH-614	Clinical Biochemistry	2(2-0)
BCH-614-P	Clinical Biochemistry Lab	1(0-1)
BTH-602	Health Biotechnology	3(3-0)
BTH-603	Environmental Biotechnology	3(3-0)
BTH-604	Industrial Biotechnology	3(3-0)
BTH-605	Food Biotechnology	2(2-0)
BTH-605-P	Food Biotechnology Lab	1(0-1)

## Semester 7

Course Code	Course Title	Credit Hour
BTH-606	Animal Biotechnology	3(3-0)
BTH-607	Cell and Tissue Culture	2(2-0)
BTH-607-P	Cell and Tissue Culture Lab	1(0-1)
BTH-695	Research methodology and Skill Enhancement	2(2-0)
BTH-695-P	Research methodology and Skill Enhancement Lab	1(0-1)
BTH-608	Principles of Biochemical Engineering	3(3-0)
BTH-696	Internship / Field Experience	3(3-0)

## Semester 8

Course Code	Course Title	Credit Hour
BTH-609	Agricultural Biotechnology	3(3-0)
BCH-618	Genomics and Proteomics	3(3-0)
BTH-610	Biosafety and Bioethics	2(2-0)
BTH-697	Capstone Research Project	3(0-3)
ZOO-607	Bioinformatics	2(2-0)
ZOO-607-P	Bioinformatics Lab	1(0-1)
BTH-611 -P	Lab Principles, Lab Safety & First Aid Lab	1(0-1)
<b>Total Credit Hours</b>		<b>126</b>

# MS Biotechnology

### Teaching Faculty

**Dr. Muhammad Rashid**

**(Assistant Professor)**

**Dr. Waheed Ahmed Chatha**

**(Assistant Professor)**

### Program Summary

Admission                      Fall & Spring

Duration                         2 Years

Total Semesters             4

Total Credit Hours         30

### Career Prospects

Biotechnology offers a wide range of career opportunities across various sectors:

- Drug development, clinical research, and medical devices.
- Genetic modification, crop improvement, bioengineering of food products and sustainable farming technologies.
- Waste management, bioremediation, and renewable energy (biofuels).
- Production of enzymes, biofuels, and biodegradable materials.
- Genetic data analysis, gene editing, and personalized medicine.
- Ensuring compliance with industry standards in biotech companies.
- Teaching, academic research, biotech innovation and biotech startups.

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
STAT-701	Biostatistics	3(3-0)
BCH-701	Research Methodology	3(3-0)
BTH-701	Advances in Analytical Techniques	3(3-0)
BTH-705	Recombinant DNA Technology	3(3-0)

### Semester 2

Course Code	Course Title	Credit Hour
BTH-704	Fermentation and Bioprocess Technology	3(3-0)
BTH-702	Modern Biotechnology; Principles and Applications	3(3-0)
BTH-707	Advances in cell and tissue culture	3(3-0)
BTH-709	Special Problems	2(2-0)
BTH-710	Seminar	1(1-0)

### Semester 3&4

Course Code	Course Title	Credit Hour
BTH-708	Research and Thesis	6(6-0)
Total Credit Hours		30

## BS Microbiology

### Teaching Faculty

**Ms. Tayyaba Rashid (Lecturer)**

**Mr. Asim Mushtaq (Lecturer)**

**Ms. Tabinda Fatima (Lecturer)**

### Program Summary

Admission	Fall & Spring
Duration	4 Years
Total Semesters	8
Total Credit Hours	126

### Career Prospects

Microbiology offers a wide range of career opportunities in various sectors:

- Diagnosing infectious diseases in hospitals and labs.
- Developing antibiotics, vaccines, and other drugs.
- Ensuring food safety and quality by studying microorganisms in food.
- Studying microbes to solve environmental issues like pollution and waste treatment.
- Using microbes in industrial processes like fermentation and biofuel production.
- Developing biotechnological products using microbes.
- Teaching and conducting research in microbiology.
- Working in disease control and prevention.

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
HIS-501	Introduction to History	2(2-0)
MIC-501	Introductory Microbiology	2(2-0)
MIC-501-P	Introductory Microbiology-Lab	1(0-1)
PSY-501	Introduction to psychology	2(2-0)
ENG-501	Functional English	3(3-0)
QRE-501	Quantitative Reasoning I	3(3-0)
ISL-501	Islamic Studies	2(2-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3(3-0)
QRE-502	Quantitative Reasoning II	3(3-0)
ICP-501	Ideology and Constitution of Pakistan	2(2-0)
ICT-501	Applications of Information and Communication Technologies	2(2-0)
ICT-501-P	Applications of Information and Communication Technologies Lab	1(0-1)
MIC-502	Microbiological Anatomy and Physiology	2(2-0)
MIC-502-P	Microbiological Anatomy and Physiology Lab	1(0-1)
ZOO-503	Cell Biology	2(2-0)
ZOO-503-P	Cell Biology Lab	1(0-1)



## Semester 3

Course Code	Course Title	Credit Hour
CHEM-501	Inorganic Chemistry	2(2-0)
CHEM-501-P	Inorganic Chemistry Lab	1(0-1)
ECO-101	Fundamentals of Ecology	2(2-0)
ECO-101-P	Fundamentals of Ecology Lab	1(0-1)
MIC-503	Bacterial Genetics	2(2-0)
MIC-503-P	Bacterial Genetics Lab	1(0-1)
BTH-501	Introduction to Biotechnology	2(2-0)
BTH-501-P	Introduction to Biotechnology Lab	1(0-1)
BCH-501	Biochemistry -I	2(2-0)
BCH-501-P	Biochemistry -I Lab	1(0-1)
CCE-501	Civics and Community Engagement	2(2-0)

## Semester 5

Course Code	Course Title	Credit Hour
ZOO-694	Biodiversity of Animals	2(2-0)
ZOO-694-P	Biodiversity of Animals Lab	1(0-1)
MIC-601	Introduction to Medical Microbiology	2(2-0)
MIC-601-P	Introduction to Medical Microbiology Lab	1(0-1)
MIC-602	General Virology	2(2-0)
MIC-602-P	General Virology Lab	1(0-1)
BOT-604	Mycology	2(2-0)
BOT-604-P	Mycology Lab	1(0-1)
MIC-603	Clinical Parasitology	2(2-0)
MIC-603-P	Clinical Parasitology Lab	1(0-1)
MIC-604	General Immunology	2(2-0)
MIC-604-P	General Immunology Lab	1(0-1)

## Semester 7

Course Code	Course Title	Credit Hour
BIO-601	Biosafety and Bioethics	3(3-0)
MIC-609	Cell and Tissue Culture	2(2-0)
MIC-609-P	Cell and Tissue Culture Lab	1(0-1)
MIC-695	Research Methodology	3(3-0)
MIC-610	Epidemiology and Public Health	2(2-0)
MIC-610-P	Epidemiology and Public Health Lab	1(0-1)
MIC-697	Internship/Field Experience	3(0-3)

## Semester 4

Course Code	Course Title	Credit Hour
CHEM -502	Organic Chemistry	2(2-0)
CHEM -502-P	Organic Chemistry Lab	1(0-1)
MIC -504	Microbial Taxonomy	2(2-0)
MIC -504-P	Microbial Taxonomy Lab	1(0-1)
MIC -505	Molecular Biology	2(2-0)
MIC -505-P	Molecular Biology Lab	1(0-1)
MIC -506	Microbiology Enzymology	2(2-0)
MIC -506-P	Microbiology Enzymology Lab	1(0-1)
BCH -502	Biochemistry -II	2(2-0)
BCH -502-P	Biochemistry -II Lab	1(0-1)
ENT -501	Entrepreneurship	2(2-0)
THQ -501	Teachings of Holy Quran	Non Credit

## Semester 6

Course Code	Course Title	Credit Hour
BOT-501	Biodiversity of Plants	2(2-0)
BOT-501-P	Biodiversity of Plants Lab	1(0-1)
MIC-605	Food Microbiology	2(2-0)
MIC-605-P	Food Microbiology Lab	1(0-1)
MIC-606	Environment Microbiology	2(2-0)
MIC-606-P	Environment Microbiology Lab	1(0-1)
MIC-607	Medical Virology	2(2-0)
MIC-607-P	Medical Virology Lab	1(0-1)
MIC-608	Fresh Water Microbiology	2(2-0)
MIC-608-P	Fresh Water Microbiology Lab	1(0-1)

## Semester 8

Course Code	Course Title	Credit Hour
MIC-611	Pharmaceutical and Industrial Microbiology	2(2-0)
MIC-611-P	Pharmaceutical and Industrial Microbiology Lab	1(0-1)
MIC-612	Soil Microbiology	2(2-0)
MIC-612	Soil Microbiology Lab	1(0-1)
MIC-613	Infectious waste management	2(2-0)
MIC-613-P	Infectious waste management Lab	1(0-1)
MIC-698	Capstone Research Project	6(0-6)
<b>Total Credit Hours</b>		<b>126</b>

## BS Botany

**Teaching Faculty**  
**Dr. Qudsia Firdous**  
 (Assistant Professor)  
**Mr. Waqas Ahmed (Lecturer)**

### Program Summary

Admission                      Fall & Spring  
 Duration                         4 Years  
 Total Semesters                8  
 Total Credit Hours             126

### Career Prospects

Botany offers diverse career opportunities in plant science and related fields:

- Researching plant biology, genetics, and growth.
- Improving crop production and farming practices.
- Cultivating and managing plants in gardens and landscapes.
- Studying plant ecosystems and biodiversity.
- Investigating plant diseases and pest control.
- Advising on plant conservation and sustainability projects.
- Managing forest resources and conservation.
- Conducting botanical research or teaching in academic settings.
- Working in disease control and prevention.

# SCHEME OF STUDIES

## Semester 1

Course Code	Course Title	Credit Hour
HIS-501	Introduction to History	2(2,0)
BOT-501	Diversity of Plants and Related Life	2(2-0)
BOT-501-P	Diversity of Plants and Related Life Lab	1(0-1)
PSY-501	Introduction to Psychology	2(2-0)
ENG-501	Functional English	3(3-0)
QRE-501	Quantitative Reasoning I	3(3-0)
ISL-501	Islamic Studies	2(2-0)

## Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3(3-0)
QRE-502	Quantitative Reasoning II	3(3-0)
ICP-501	Ideology and Constitution of Pakistan	2(2-0)
ICT-501	Applications of Information and Communication Technologies	2(2-0)
ICT-501-P	Applications of Information and Communication Technologies Lab	1(0-1)
ZOO-506	Cell Biology	2(2-0)
ZOO-506-P	Cell Biology Lab	1(0-1)
BOT-503	Plant Systematics, Anatomy and Development/Embryology	2(2-0)
BOT-503-P	Plant Systematics, Anatomy and Development/Embryology Lab	1(0-1)

## Semester 3

Course Code	Course Title	Credit Hour
CHEM-501	Inorganic Chemistry	2(2-0)
CHEM-501-P	Inorganic Chemistry Lab	1(0-1)
EC0-501	Fundamentals of Ecology	2(2-0)
EC0-501-P	Fundamentals of Ecology Lab	1(0-1)
ZOO-501	Animal Diversity-I	2(2-0)
ZOO-501-P	Animal Diversity-I Lab	1(0-1)
CCE-501	Civic and Community Engagement	2(2-0)
MIC-501	Microbiology	2(2-0)
MIC-501-P	Microbiology Lab	1(0-1)
BOT-505	Plant Physiology	2(2-0)
BOT-505-P	Plant Physiology Lab	1(0-1)

## Semester 4

Course Code	Course Title	Credit Hour
CHEM-502	Organic Chemistry	2(2-0)
ZOO-502	Animal Diversity-II	2(2-0)
ZOO-502-P	Animal Diversity-II Lab	1(0-1)
BOT-507	Ethnobotany	2(2-0)
BOT-507-P	Ethnobotany Lab	1(0-1)
BCH-606	Molecular Biology	2(2-0)
BCH-606-P	Molecular Biology Lab	1(0-1)
BOT-508	Entrepreneurship	2(2-0)
ZOO-506	Genetics	3(3-0)
THQ-501	Teachings of Holy Quran	Non Credit

## Semester 5

Course Code	Course Title	Credit Hour
BOT-601	Plant Pathology	3(3-0)
BTH-602	Biodegradation and Bioremediation	2(2-0)
BTH-602-P	Biodegradation and Bioremediation Lab	1(0-1)
MIC-620	Bacteriology and Virology	3(3-0)
BOT-604	Lower Fungi	2(2-0)
BOT-604-P	Lower Fungi Lab	1(0-1)
BOT-605	Bryology	2(2-0)
BOT-605-P	Bryology Lab	1(0-1)

## Semester 6

Course Code	Course Title	Credit Hour
BIO-601	Biosafety and Bioethics	2(2-0)
BIO-601-P	Biosafety and Bioethics Lab	1(0-1)
BOT-602	Plant Biotechnology	2(2-0)
BOT-602-P	Plant Biotechnology Lab	1(0-1)
BOT-603	Challenges of a Changing Earth	3(3-0)
BOT-604	Mycology	2(2-0)
BOT-604-P	Mycology Lab	1(0-1)
BCH-602	Plant Biochemistry	2(2-0)
BCH-602-P	Plant Biochemistry Lab	1(0-1)

## Semester 7

Course Code	Course Title	Credit Hour
BOT-611	Diversity of Vascular Plants	2(2-0)
BOT-611-P	Diversity of Vascular Plants Lab	1(0-1)
BOT-612	Biodiversity & Conservation	2(2-0)
BOT-612-P	Biodiversity & Conservation Lab	1(0-1)
BOT-613	Plant Anatomy	2(2-0)
BOT-613-P	Plant Anatomy Lab	1(0-1)
BCH-618	Molecular Genetics	2(2-0)
BCH-618-P	Molecular Genetics Lab	1(0-1)
BOT-699	Research Planning and Report Writing	2(2-0)
BOT-699-P	Research Planning and Report Writing Lab	1(0-1)
BOT-697	Internship/Field Experience	3(3-0)

## Semester 8

Course Code	Course Title	Credit Hour
BOT-615	Environmental Biology	2(2-0)
BOT-615-P	Environmental Biology	1(1-0)
BOT-616	Palynology	2(2-0)
BOT-616-P	Palynology Lab	1(1-0)
BOT-617	Plant Nutrition and Soil Fertility	2(2-0)
BOT-617-P	Plant Nutrition and Soil Fertility Lab	1(1-0)
BOT-698	Capstone Research Project	6(0-06)
<b>Total Credit Hours</b>		<b>126</b>

## MS Pharmacology

**Teaching Faculty**  
**Prof. Dr. Syed Muhammad Nurulain**  
**(Professor)**  
**Dr. Nimrah Khalid (Assistant Professor)**

### Program Summary

Admission                      Fall & Spring  
 Duration                        2 Years  
 Total Semesters                4  
 Total Credit Hours            30

### Career Prospects

Pharmacology offers a variety of career opportunities in the medical, research, and pharmaceutical sectors:

- Studying drug effects on humans for safety and efficacy.
- Developing new drugs and therapies.
- Assessing the safety and effects of drugs and chemicals.
- Ensuring compliance with drug regulations.
- Monitoring the safety of medicines post-market.
- Providing scientific support to healthcare professionals and companies.
- Dispensing medications and advising patients.
- Teaching pharmacology or conducting drug-related research.

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
STAT-701	Biostatistics	3(3-0)
BCH-701	Research Methodology	3(3-0)
BTH-701	Advance Analytical Techniques	3(3-0)
PHARM-707	Therapeutic Drug monitoring	3(3-0)

### Semester 2

Course Code	Course Title	Credit Hour
PHARM-708	Chemotherapeutics	3(3-0)
PHARM-710	Pharmacopathology	3(3-0)
PHARM-709	Basic and advanced pharmacology	3(3-0)
BCH-703	Advances in Biochemistry	3(3-0)

### Semester 3&4

Course Code	Course Title	Credit Hour
PHARM-711	Research and Thesis	6(6-0)
Total Credit Hours		30

## FACULTY OF SCIENCES

### Department of Food, Nutrition & Agricultural Sciences

## Introduction

This Department feels pleasure to welcome all the students who have taken admission in the Grand Asian University, Sialkot. The Department being one of the major departments is offering ADP, BS, MS and PhD Programs in Human Nutrition and Dietetics and Food science and Technology. In addition, this department is also offering BS programs in Food Safety and Quality Management, Environmental Sciences and Public Health. Among them, the discipline of Human Nutrition and Dietetics is one of the most chosen departments. The message from the Dean of Nutrition and Agricultural Sciences typically emphasizes the importance of sustainable practices, innovation in food systems, and the role of nutrition in public health. It may also highlight the commitment to research, education, and community engagement, aiming to address global challenges like food security and health disparities. Collaboration across disciplines is often encouraged to foster advancements in these critical areas.

## Objective

The core objectives are to

- produce competent graduates with adequate scientific background to meet the implied needs of public and private sector
- provide professional leadership, services and outreach activities in the major areas of Nutritional Sciences, food science, environmental sciences and public health.
- contribute and help resolving the nutritional and health issues in our country
- develop human resource competent enough to address emerging issues and challenges in the field of food science and technology
- train man power having capacity to serve the nation in terms of food security and safety
- promote critical thinking and problem-solving skills to analyze and address complex environmental challenges.
- equip students with practical skills in environmental assessment, monitoring, and data analysis, using modern tools and technologies
- instill a commitment to ethical practices and social responsibility in addressing public health challenges.
- prepare graduates for careers in various public health sectors, including epidemiology, health education, health policy, and environmental health.

## Programs Being Offered

ADP Human Nutrition and Dietetics  
ADP Food Science and Technology  
BS Human Nutrition and Dietetics  
BS Food Science and Technology

BS Food Safety and Quality Management  
BS Environmental Sciences  
Post Graduate Diploma in Halal Industry



## Message From HOD



With great pleasure I welcome all the students who have taken admission in the Department of Food, Nutrition, and Agricultural Sciences at Grand Asian University, Sialkot. As one of the major and dynamic departments of the university, we are committed to providing quality education, fostering research, and preparing our students to make significant contributions to the food, nutrition, and environmental sectors.

Our department offers ADP and BS programs in Human Nutrition and Dietetics, Food Science and Technology, Food Safety and Quality Management, and Environmental Sciences. These programs are designed to equip students with a deep understanding of the principles and practices required to address the challenges of the modern world, including those related to food security, public health, and sustainable food, nutrition and environmental practices. The department highlights the importance of

innovation and sustainability in food systems, food quality management, role of food and nutrition in clinical therapies specifically and as well as the crucial role in improving the nutritional and environmental health of public at large. Our rigorous curriculum is designed to build a solid foundation in both theoretical concepts and practical laboratory skills, ensuring that our students are well-prepared for careers in research, healthcare, environmental management, and industry.

We are deeply committed to advancing research and education that address global challenges such as food insecurity, nutritional and health disparities, and environmental sustainability. Collaboration across disciplines is encouraged within our department, enabling students and faculty to engage in ground breaking work that tackles these critical issues.

We, the professional faculty of the department, are excited to work with our current and new students, to guide them through this journey of learning, research, and community engagement. As you embark on this exciting academic adventure, we encourage you to take full advantage of the opportunities before you, and together, we will contribute to the advancement of food, nutrition, and agricultural sciences on both a national and global scale.

Welcome to a brighter future with Grand Asian University!

**Prof. Muhammad Mushtaq Ahmad**  
PhD and Post Doctorate  
Chairman Halal Certification Board  
Punjab Halal Development Agency, Lahore

# FACULTY OF SCIENCES

## Department of Food, Nutrition & Agricultural Sciences

### ADP and BS Human Nutrition and Dietetics

#### Teaching Faculty

Dr. Muhammad Mushtaq Ahmad (Professor)  
PhD, Post Doc  
Dr. Aneeq ur Rehman (Assistant Professor)  
Ms. Rimsha Sattar (Lecturer)

#### Program Summary

Admission Fall and Spring  
Program Duration 2 & 4 Years  
Number of Semesters 4 & 8  
Total Credit Hours 135

#### Career Prospects

- Clinical Dietitian/Nutritionist
- Public Health Nutritionist
- Food Service Manager
- Private Practice
- Research and Academia
- Corporate Nutritionist/Food Industry Expert
- Sports Nutritionist
- Health Coach
- Policy Advisor

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ES-501	Introduction to Environmental Sciences	3(3-0)
HIST-501	Introduction to History	2(2-0)
HND-501	Fundamentals of Human Nutrition	3(3-0)
ENG-501	Functional English	3(3-0)
QRE-501	Quantitative Reasoning-I	3(3-0)
ISL-501	Islamic Studies	2(2-0)

### Semester 2

Course Code	Course Title	Credit Hour
HND-502	Introduction to Food Science and Technology	3(3-0)
ICT-501	Applications of Information and Communication Technologies	2(2-0)
ICT-501 P	Applications of Information and Communication Technologies lab	1(0-1)
ICP-501	Ideology & Constitution of Pakistan	2(2-0)
ENG-502	Expository Writing	3(3-0)
QRE-502	Quantitative Reasoning-II	3(3-0)
CCE-501	Civics & Community Engagement	2(2-0)

### Semester 3

Course Code	Course Title	Credit Hour
HND-503	Macronutrients in Human Nutrition	3(3-0)
PSY-500	Introduction to Psychology	2(2-0)
HND-504	Human Anatomy	2(2-0)
HND-504 P	Human Anatomy Lab	1(0-1)
HND-505	General Pathology	2(2-0)
HND-505 P	General Pathology Lab	1(0-1)
HND-506	Nutritional Education and Awareness	3(3-0)
HND-507	Food Safety and Toxicology	3(3-0)

### Semester 4

Course Code	Course Title	Credit Hour
HND-508	Micronutrients in Human Nutrition	3(3-0)
HND-509	Human Physiology-I	3(3-0)
HND-510	Nutrition through Life Cycle	3(3-0)
HND-511	Meal Planning and Management	2(2-0)
HND-511 P	Meal Planning and Management Lab	1(0-1)
HND-512	Assessment of Nutritional Status	2(2-0)
HND-512 P	Assessment of Nutritional Status Lab	1(0-1)
ENT-501	Entrepreneurship	2(2-0)
THQ-501	Teaching of Holy Quran	Non-Credited
Total Credit Hours		66

## Semester 5

Course Code	Course Title	Credit Hour
FSQM-501	Food Safety and Quality Management	3(3-0)
FBIT-515	Food Biotechnology	3(3-0)
HND-513	Human Physiology-II	3(3-0)
HND-514	Food Microbiology	2(2-0)
HND-514 P	Food Microbiology Lab	1(0-1)
HND-515	Functional Food and Nutraceutical	3(3-0)
HND-516	Dietetics-I	3(3-0)

## Semester 6

Course Code	Course Title	Credit Hour
HND-517	Public Health Nutrition	3(3-0)
HND-518	Scientific Report Writing	3(3-0)
HND-519	Nutritional Practices in Clinical Care	2(2-0)
HND-519 P	Nutritional Practices in Clinical Care Lab	1(0-1)
HND-520	Dietetics-II	3(3-0)
HND-521	Food Analysis	2(2-0)
HND-521 L	Food Analysis LAB	1(0-1)
BIOCHEM-501	Mineral and Water Metabolism	3(3-0)

## Semester 7

Course Code	Course Title	Credit Hour
HND-522	Dietetics-II	3(3-0)
HND-523	Nutrition in Emergencies	3(3-0)
HND-524	Sports Nutrition	2(2-0)
HND-524 P	Sports Nutrition Lab	1(0-1)
HND-525	Food Service Management	3(3-0)
HND-526	Internship	3(0-3)

## Semester 8

Course Code	Course Title	Credit Hour
HND-527	Infant and Young Child Feeding	2(2-0)
HND-527 P	Infant and Young Child Feeding Lab	1(0-1)
HND-528	Global Food Issues	3(3-0)
HND-529	Nutrition and Psychology	3(3-0)
HND-530	Nutrition Policies and Programs	3(3-0)
HND-531	Research Project	3(3-0)
HND-532	Food and Drug Laws	3(3-0)
Total Credit Hours		135

## ADP and BS Food Science and Technology

**Teaching Faculty**  
**Dr. Waheed Ahmad (Assistant Professor)**  
**Ms. Habiba Shahzad (Lecturer)**

### Program Summary

Admission                      Fall and Spring  
 Program Duration            2 & 4 Years  
 Number of Semesters      4 & 8  
 Total Credit Hours          66 & 135

### • Career Prospects

Graduates with a degree in Food Science and Technology have diverse career opportunities across industries related to food production, safety, quality, and innovation.

- Food Technologist
- Quality Assurance Manager
- Product Development Scientist
- Food Safety Specialist
- Food Microbiologist.
- Supply Chain Manager
- Food Analyst/Chemist:
- Entrepreneur/Business Owner
- Food Marketing and Sales
- Research Scientist (Academic or Industry)

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ES-501	Introduction to Environmental Sciences	3(3-0)
HIS-501	Introduction to History	2(2-0)
FST-501	Introduction to Food Science and Technology	3(3-0)
ENG-501	Functional English	3(3-0)
QRE-501	Quantitative Reasoning -I	3(3-0)
ISL-501	Islamic Studies	2(2-0)

### Semester 2

Course Code	Course Title	Credit Hour
FST-502	Fundamentals of Human Nutrition	3(3-0)
ICT-501	Applications of Information and Communication Technologies	2(2-0)
ICT-501 P	Applications of Information and Communication Technologies Lab	1(0-1)
ICP-501	Ideology & Constitution of Pakistan	2(2-0)
ENG-502	Expository Writing	3(3-0)
QRE-502	Quantitative Reasoning I	3(3-0)
CCE-501	Civics & Community Engagement	2(2-0)

## Semester 3

Course Code	Course Title	Credit Hour
FST-503	Food Processing and Preservation	2(2-0)
FST-503 P	Food Processing and Preservation Lab	1(0-1)
FST-504	Food Microbiology	2(2-0)
FST-504 P	Food Microbiology Lab	1(0-1)
FST-505	Food Chemistry	3(3-0)
PSY-501	Introduction to Psychology	2(2-0)
FST-506	Technology of Fats and Oils	2(2-0)
FST-506 P	Technology of Fats and Oils Lab	1(0-1)
FST-507	Dairy Technology	2(2-0)
FST-507 P	Dairy Technology Lab	1(0-1)

## Semester 4

Course Code	Course Title	Credit Hour
FST-508	Fruits and Vegetable Processing	2(2-0)
FST-508 P	Fruits and Vegetable Processing Lab	1(0-1)
ENT-501	Entrepreneurship	2(2-0)
FST-509	Bakery Product Technology	2(2-0)
FST-509 P	Bakery Product Technology Lab	1(0-1)
FST-510	Food Analysis	2(2-0)
FST-510 P	Food Analysis Lab	1(0-1)
FST-511	Sensory Evaluation of Foods	2(2-0)
FST-511 P	Sensory Evaluation of Foods Lab	1(0-1)
FST-512	Beverage Technology	2(2-0)
FST-512 P	Beverage Technology Lab	1(0-1)
THQ-501	Teaching of Holy Quran	Non-Credit
Total Credit Hours		66

## Semester 5

Course Code	Course Title	Credit Hour
BIOF515	Food Biotechnology	3(3-0)
BCH-501	Introductory Biochemistry	3(3-0)
FST-513	Sugar Technology	3(3-0)
FST-514	Cereal Technology	3(3-0)
FST-515	Food Safety	3(3-0)
FST-516	Food Packaging	3(3-0)

## Semester 6

Course Code	Course Title	Credit Hour
BIOCHEM-501	Mineral and Water Metabolism	3(3-0)
FST-517	Community Nutrition	3(3-0)
FST-518	Food Product Development	2(2-0)
FST-518 P	Food Product Development Lab	1(0-1)
FST-519	Meat Technology	2(2-0)
FST-519 P	Meat Technology Lab	1(0-1)
FST-520	Food Plant Layout and Sanitation	3(3-0)
FST-521	Scientific Report Writing	3(3-0)

## Semester 7

Course Code	Course Title	Credit Hour
FST-522	Post Harvest Technology	3(3-0)
FST-523	Poultry and Egg Processing	3(3-0)
FST-524	Confectionery and Snack Foods	3(3-0)
FST-525	Unit Operation in Food Processing	3(3-0)
FST-526	Internship	3(3-0)

## Semester 8

Course Code	Course Title	Credit Hour
FST-527	Sea Food Processing Technology	3(3-0)
FST-528	Extrusion Technology	3(3-0)
FST-529	Food Quality Management	3(3-0)
FST-530	Milk and Meat Hygiene and Public Health	3(3-0)
FST-531	Research Project	3(3-0)
FST-532	Food Law and Regulation	3(3-0)
Total Credit Hours		135

## BS Food Safety and Quality Management

### Teaching Faculty

**Dr. Muhammad Waheed Iqbal**  
**Ms. Palwasha Shafique (Lecturer)**

### Program Summary

Admission: Fall and Spring  
 Program Duration: 4 Years  
 Number of Semesters: 8  
 Total Credit Hours: 128

### Career Prospects

- Food Safety Manager
- Quality Assurance (QA) Manager
- Food Auditor/Inspector
- Regulatory Affairs Specialist
- Food Safety Consultant
- Compliance Officer
- Food Safety Coordinator
- Food Microbiologist
- Quality Control Analyst
- Supply Chain and Procurement Manager
- Food Safety Trainer/Educator



# SCHEME OF STUDIES

## Semester 1

Course Code	Course Title	Credit Hour
ES-501	Introduction to Environmental Sciences	3(3-0)
HIS-501	Introduction to History	2(2-0)
FSQM501	Introduction to Food Science & Quality Management	3(3-0)
ENG-501	Functional English	3(3-0)
QRE-501	Quantitative Reasoning	3(3-0)
ISL-501	Islamic Studies	2(2-0)

## Semester 2

Course Code	Course Title	Credit Hour
FSQM502	Food Processing & Preservation	2(2-0)
FSQM502P	Food Processing & Preservation Lab	1(0-1)
ICT-501	Applications of Information and Communication Technologies	2(2-0)
ICT-501P	Applications of Information and Communication Technologies Lab	1(0-1)
ICP-501	Ideology & Constitution of Pakistan	2(2-0)
ENG-502	Expository Writing	3(3-0)
QRE-502	Quantitative Reasoning	3(3-0)
CCE-501	Civics & Community Engagement	2(2-0)

## Semester 3

Course Code	Course Title	Credit Hour
FSQM503	Pre-Requisites Programs in Food Safety and Quality	3(3-0)
FSQM504	Risk Assessment and Control Plans	3(3-0)
FSQM505	Food Safety & Hygiene	3(3-0)
PSY-500	Introduction to Psychology	2(2-0)
MGT-510	Human Resource Management	3(3-0)
BCH-501	Introduction to Biochemistry	3(3-0)

## Semester 4

Course Code	Course Title	Credit Hour
FSQM-506	Food Chemistry	2(2-0)
FSQM-506 P	Food Chemistry Lab	1(0-1)
FSQM-507	Post-Harvest Technology	2(2-0)
FSQM-507 P	Post-Harvest Technology Lab	1(0-1)
ENT-501	Entrepreneurship	2(2-0)
FSQM-508	Introduction to Food Retail	3(3-0)
SCM-501	Supply Chain Management	3(3-0)
FSQM-509	Food Safety Management Systems	2(2-0)
THQ-501	Teaching of Holy Quran	Non-Credited

## Semester 5

Course Code	Course Title	Credit Hour
FSQM510	Food Microbiology	2(2-0)
FSQM510P	Food Microbiology Lab	1(0-1)
FSQM511	Pakistan Halal Food Standards (PS32013)	3(3-0)
FSQM512	Integrated Pest Management	3(3-0)
FSQM513	Food Waste Management	2(2-0)
FSQM513P	Food Waste Management Lab	1(0-1)
FSQM514	Occupational and Health Safety Systems	3(3-0)
FSQM515	Audit and Inspection Techniques	3(3-0)

## Semester 6

Course Code	Course Title	Credit Hour
FSQM-516	Food Packaging	2(2-0)
FSQM-516 P	Food Packaging Lab	1(0-1)
FSQM-517	Introduction to Food Labeling	3(3-0)
FSQM-518	Food Toxins and Allergens	3(3-0)
FSQM-519	Food Analysis and Instrumentation	2(2-0)
FSQM-519 P	Food Analysis and Instrumentation Lab	1(0-1)
MGT-525	Production and Operation Management	3(3-0)
FSQM-520	Halal and Ethnic Food Management	3(3-0)

## Semester 7

Course Code	Course Title	Credit Hour
FSQM-521	Food Laws and Regulations	3(3-0)
FSQM-522	Global Good Agricultural Practices	3(3-0)
MGT-523	Consumer Behavior	3(3-0)
FSQM-524	Scientific Report writing	3(3-0)
FSQM-525	Internship	3(3-0)

## Semester 8

Course Code	Course Title	Credit Hour
FSQM-526	Food Plant Layout and Sanitation	3(3-0)
FSQM-527	Food Biotechnology	3(3-0)
FSQM-528	Introduction to Food Fraud Mitigation	3(3-0)
FSQM-529	Research Project	3(3-0)
<b>Total Credit Hours</b>		<b>128</b>

## BS Environmental Sciences

**Teaching Faculty**  
**Dr. Khadija Siddique**  
 (Assistant Professor)  
**Ms. Kashaf Nasir (Lecturer)**

### Program Summary

Admission                      Fall and Spring  
 Program Duration            4 Years  
 Number of Semesters       8  
 Total Credit Hours           137

### Career Prospects

- Environmental Consultant
- Environmental Scientist
- Conservation Biologist
- Wildlife Manager
- Environmental Policy Analyst
- Sustainability Coordinator
- Environmental Educator
- Water Resource Specialist
- Air Quality Specialist
- Soil Scientist

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ES-501	Introduction to Environmental Science	3(3-0)
HIS-501	Introduction to History	2(2-0)
ES-502	Introduction to Earth Sciences	3(3-0)
ENG-501	Functional English	3(3-0)
QRE-501	Quantitative Reasoning I	3(3-0)
ISL-501	Islamic Studies	2(2-0)

### Semester 2

Course Code	Course Title	Credit Hour
ES-502	Fundamentals of Ecology	3(3-0)
ICT-501	Applications of Information and Communication Technologies	2(2-0)
ICT-501 P	Applications of Information and Communication Technologies Lab	1(0-1)
ICP-501	Ideology & Constitution of Pakistan	2(2-0)
ENG-502	Expository Writing	3(3-0)
QRE-502	Quantitative Reasoning II	3(3-0)
CCE-501	Civics & Community Engagement	2(2-0)

### Semester 3

Course Code	Course Title	Credit Hour
CHEM-503	Basic Chemistry	2(2-0)
CHEM-503 P	Basic Chemistry Lab	1(0-1)
ES-503	Climatology	3(3-0)
ES-504	Environmental Pollution	3(3-0)
ES-505	Environmental Economics	3(3-0)
PSY-500	Introduction to Psychology	2(2-0)
ES-506	Environmental Profile of Pakistan	3(3-0)

### Semester 4

Course Code	Course Title	Credit Hour
ES-507	Environmental Toxicology	2(2-0)
ES-507 P	Environmental Toxicology Lab	1(0-1)
MICR-522	Environmental Microbiology	2(2-0)
MICR-522 P	Environmental Microbiology Lab	1(0-1)
ES-508	Biodiversity & Conservation	3(3-0)
ENT-501	Entrepreneurship	2(2-0)
ES-509	Energy and Environment	2(2-0)
ES-510	Solid Waste Management	3(3-0)
THQ-501	Teaching of Holy Quran	Non-Credited

### Semester 5

Course Code	Course Title	Credit Hour
ES-511	Applied Ecology	2(2-0)
ES-511 P	Applied Ecology Lab	1(0-1)
ES-512	Population & Environment	3(3-0)
BCH-501	Introductory Biochemistry	3(3-0)
ES-513	Analytical Techniques in Environmental Science	1(1-0)
ES-513 P	Analytical Techniques in Environmental Science Lab	2(0-2)
ES-514	Public Health & Environment	3(3-0)
ES-515	Pollution Control Technologies	3(3-0)

### Semester 6

Course Code	Course Title	Credit Hour
ES-516	Environmental Biotechnology	2(2-0)
ES-516 P	Environmental Biotechnology Lab	1(0-1)
ES-517	GIS & Remote Sensing	2(2-0)
ES-517 P	GIS & Remote Sensing Lab	1(0-1)
ES-518	Environmental Management	3(3-0)
ES-519	Environmental Governance	3(3-0)
ES-520	Environmental Monitoring	2(2-0)
ES-520 P	Environmental Monitoring Lab	1(0-1)
ES-521	Water Resources Management	3(3-0)

## Semester 7

Course Code	Course Title	Credit Hour
ES-522	AgroEcology	3 (3-0)
ES-523	Basics of Environmental Impact Assess	3 (3-0)
ES-524	Natural Resource Management	3 (3-0)
ES-525	Research Methods in Environmental Sc	3 (3-0)
ES-526	Climate Change	3 (3-0)
ES-527	Internship	3 (3-0)

## Semester 8

Course Code	Course Title	Credit Hour
ES-528	Environmental Laws & Policies	3(3-0)
ES-529	Occupational Health and Safety	3(3-0)
ES-530	Urban Environmental Management	2(2-0)
ES-530 P	Urban Environmental Management Lab	1(0-1)
ES-531	Air and Noise Pollution	3(3-0)
ES-532	Disaster Risk Management	3(3-0)
ES-533	Research Project	3(3-0)
<b>Total Credit Hours</b>		<b>137</b>

## Post Graduate Diploma in Halal Industry

### Teaching Faculty

Dr. Muhammad Mushtaq Ahmad  
(HoD and Professor)  
Dr. Waheed Ahmad (Assistant Professor)  
Ms. Habiba Shahzad (Lecturer)

### Program Summary

Admission: Fall and Spring  
Timing: Weekend Classes  
Total Credit Hours: 24

### Career Prospects

- Halal Compliance Assistant
- Halal Certification Assistant
- Quality Control Technician
- Halal Product Sales Representative
- Halal Food Production Operator
- Halal Supply Chain Assistant

## SCHEME OF STUDIES

### Semester 1

Course code	Course Title	Credit Hour
HI-701	Halal and Haram in the Light of Quran and Sunnah	3(3-0)
HI-702	Food Safety and Hygiene	3(3-0)
HI-703	Animal Slaughtering	3(3-0)
HI-704	Food Ingredients and Control	3(3-0)

### Semester 2

Course code	Course Title	Credit Hour
HI-705	Global Halal Market Issues, Standards and Opportunities	3(3-0)
HI-706	Pakistan Halal Food Standard(PS 3733-2019)	3(3-0)
HI-707	Industry based case study	3(3-0)
HI-708	Halal Financing, Textiles and Cosmetics	3(3-0)

## FACULTY OF SCIENCES

### Department of Physics

#### Introduction

Department of Physics is one of the rapidly growing departments in GAUS. Our well-known and experienced Faculty members are devoted to provide students with the platform where hard work, dedication and willingness to learn can make them outclass. With the ultimate goal to strive for expanding and strengthening opportunities. Traditional classroom experiences besides hands-on skills in the laboratory and research under supervision of devoted and dedicated faculty members make them trained in professional fields. The department is offering ADP, BS and MPhil programs and endeavoring hard to provide high-quality education and innovative research in physics that advances scientific understanding and addresses real-world challenges. We are committed to cultivating an inclusive learning environment, supporting the professional growth of students and faculty, and contributing to scientific progress through collaboration and discovery.

#### Objectives

The core objectives of this department are to:

- build up expertise among the students to match the national level required education & research and become national leader in producing highly professional and motivated Physicist.
- preparing undergraduate and graduates for advanced studies
- develop hands-on experience in different laboratory techniques and modern instrumentation.
- equip students with the necessary skill set for pursuing careers in physics education.
- research and industry in government or private organization.

#### Programs Being Offered

ADP Physics

BS Physics

MS Physics

## Message From HOD



The Department of Physics at Grand Asian University, Sialkot, is one of the fastest-growing departments, committed to fostering a robust learning environment where students can thrive academically, professionally, and personally.

The department's primary goal is to expand and strengthen opportunities for physics students, ensuring they receive a well-rounded education that prepare them for the challenges of the modern world. Alongside traditional classroom experiences, we emphasize the development of hands-on skills in the laboratory and offer students the chance to engage in research projects under the mentorship of our devoted faculty. This combination of theoretical knowledge and practical experience makes our students experts in their field and equips them with the skills necessary to tackle complex real-world problems.

Our faculty members are deeply committed to cutting-edge experimental and theoretical research, collaborating with various renowned institutes across Pakistan. This collaboration not only enriches the research environment but also provides students with valuable exposure to innovative work in physics, encouraging them to engage in high-level scientific inquiry. Additionally, we place great emphasis on the moral and ethical development of our students, aiming to nurture not only their scientific expertise but also their sense of responsibility as future leaders and good citizens.

At the Department of Physics, we are confident that our students will emerge as highly skilled, ethical, and well-rounded professionals, ready to make meaningful contributions in both the scientific community and society at larger scale.

**Dr. Fasih-Ud-Din**  
PhD Physics



## ADP Physics

**Teaching Faculty**  
**Dr. Abdul Jabbar (Assistant Professor)**  
**Miss Haiqa Nadeem (Lecturer)**

### Program Summary

Admission                      Fall and Spring  
 Duration                        2 years  
 Number of Semesters        4  
 Total Credit Hours            66

### Career Prospects

- Colleges and Higher Educational Institutions
- National Research & Development Organizations such as PICRET, PNRA, KRL, NESCOM, PAEC, PINSTECH, KANUP, PIEAS, NELOP etc.

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3(3-0)
PSY-501	Introduction to Psychology	2(2-0)
MTH-520	Calculus and Analytical Geometry	3(3-0)
ISL-501	Islamic Studies	2(2-0)
ICT-501	Applications of Information and Communication Technologies	2(2-0)
ICT-501 P	Applications of Information and Communication Technologies Lab	1(0-1)
QRE-501	Quantitative Reasoning	3(3-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3(3-0)
ICP-501	Ideology and Constitution of Pakistan	2(2-0)
QRE-502	Quantitative Reasoning II	3(3-0)
PHY-501	Mechanics I	2(2-0)
PHY-501 P	Mechanics I Lab	1(0-1)
ENT-501	Entrepreneurship	2(2-0)
CCE-501	Civics & Community Engagement	2(2-0)

### Semester 3

Course Code	Course Title	Credit Hour
MTH-526	Multivariable Calculus	3(3-0)
ENG-503	Creative Writing	2(2-0)
PHY-502	Waves and Oscillations	2(2-0)
PHY-502 P	Waves and Oscillation Lab	1(0-1)
PHY-503	Electricity and Magnetism I	3(3-0)
CHEM-510	Introductory Chemistry	3(3-0)
PHY-504	Mechanics II	3(3-0)

### Semester 4

Course Code	Course Title	Credit Hour
PHY-505	Electricity and Magnetism II	3(3-0)
MTH514	Differential Equations and Applications	3(3-0)
PHY-506	Computing Tools for Physicists	3(3-0)
PHY-507	Heat and Thermodynamics	3(3-0)
PHY-508	Modern Physics	2(2-0)
PHY-508 P	Modern Physics Lab	1(0-1)
MTH521	Discrete Mathematics	3(3-0)
THQ-501	Teaching of Holy Quran	Non-credit
<b>Total Credit Hours:</b>		<b>66</b>

# BS Physics

**Teaching Faculty**  
**Dr. Fasih Ud Din**  
 (Associate Professor & HoD)  
**Dr. Abdul Jabbar (Assistant Professor)**  
**Miss Haiqa Nadeem (Lecturer)**

**Program Summary**

Admission                      Fall and Spring  
 Duration                        4 years  
 Number of Semesters        8  
 Total Credit Hours            130

**Career Prospects**

- Colleges and Higher Educational Institutions
- National Research & Development Organizations such as PICRET, PNRA, KRL, NESCOM, PAEC, PINSTECH, KANUP, PIEAS, NELOP etc.

## Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3(3-0)
PSY-500	Introduction to Psychology	2(2-0)
MTH520	Calculus and Analytical Geometry	3(3-0)
ISL-501	Islamic Studies	2(2-0)
ICT-501	Applications of Information and Communication Technologies	2(2-0)
ICT-501P	Applications of Information and Communication Technologies Lab	1(0-1)
QRE-501	Quantitative Reasoning	3(3-0)

## Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3(3-0)
ICP-501	Ideology and Constitution of Pakistan	2(2-0)
QRE-502	Quantitative Reasoning -II	3(3-0)
PHY-501	Mechanics -I	2(2-0)
PHY-501 P	Mechanics -I Lab	1(0-1)
ENT-501	Entrepreneurship	2(2-0)
CCE-501	Civics & Community Engagement	2(2-0)

## Semester 3

Course Code	Course Title	Credit Hour
MTH526	Multivariable Calculus	3(3-0)
ENG-503	Creative Writing	2(2-0)
PHY-502	Waves and Oscillations	2(2-0)
PHY-502P	Waves and Oscillations Lab	1(0-1)
PHY-503	Electricity and Magnetism	3(3-0)
CHEM510	Introductory Chemistry	3(3-0)
PHY-504	Mechanics II	3(3-0)

## Semester 4

Course Code	Course Title	Credit Hour
PHY-505	Electricity and Magnetism II	3(3-0)
MTH514	Differential Equations and Applications	3(3-0)
PHY-506	Computing Tools for Physicists	3(3-0)
PHY-507	Heat and Thermodynamics	3(3-0)
PHY-508	Modern Physics	2(2-0)
PHY-508P	Modern Physics Lab	1(0-1)
MTH521	Discrete Mathematics	3(3-0)
THQ-501	Teaching of Holy Quran	Non-credit

## Semester 5

Course Code	Course Title	Credit Hour
PHY-601	Methods of Mathematical Physics I	3(3-0)
PHY-603	Classical Mechanics	3(3-0)
PHY-605	Electrodynamics I	3(3-0)
PHY-607	Electronics	3(3-0)
PHY-611	Lab Course (Electromagnetism)	3(3-0)

## Semester 6

Course Code	Course Title	Credit Hour
PHY-602	Methods of Mathematical Physics -II	3(3-0)
PHY-604	Quantum Mechanics -I	3(3-0)
PHY-606	Nuclear Physics	3(3-0)
PHY-608	Electrodynamics -II	3(3-0)
PHY-612	Lab Course (Atomic & Nuclear Physics)	3(3-0)

## Semester 7

Course Code	Course Title	Credit Hour
PHY-613	Quantum Mechanics II	3(3-0)
PHY-615	Plasma Physics	3(3-0)
PHY-617	Solid State Physics I	3(3-0)
PHY-619	Particle Physics*	3(3-0)
PHY-621	Advanced Electronics*	3(3-0)
PHY-623	Environmental Physics I*	3(3-0)
PHY-625	Health and Medical Physics I*	3(3-0)
PHY-627	Climatology and Metrology*	3(3-0)
PHY-629	Lab Course (Electronics)	3(3-0)
THQ-501	Teaching of Holy Quran	0(0-0)

## Semester 8

Course Code	Course Title	Credit Hour
PHY-614	Computational Physics	3(3-0)
PHY-616	Solid State Physics II	3(3-0)
PHY-618	Laser and Optics	3(3-0)
PHY-620	Statistical Mechanics	3(3-0)
PHY-622	Particle Physics II*	3(3-0)
PHY-624	Advanced Electronics Lab Course*	3(3-0)
PHY-626	Environmental Physics Lab Course*	3(3-0)
PHY-628	Health and Medical Physics II*	3(3-0)
PHY-630	Climatology and Metrology II*	3(3-0)
PHY-632	Research and Thesis**	6(6-0)
PHY-634	Project	3(3-0)
<b>Total Credit Hours:</b>		<b>130</b>

# MPhil Physics

**Teaching Faculty**  
**Dr. Fasih Ud Din**  
 (Associate Professor & HoD)  
**Dr. Abdul Jabbar (Assistant Professor)**  
**Miss Haiqa Nadeem (Lecturer)**

## Program Summary

Admission                      Fall and Spring  
 Duration                        4 years  
 Number of Semesters        8  
 Total Credit Hours            130

## Career Prospects

- Colleges and Higher Educational Institutions
- National Research & Development Organizations such as  
 PICRET, PNRA, KRL, NESCOM, PAEC, PINSTECH, KANUP, PIEAS, NELOP etc.

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
PHY-701	Mathematical Methods of Physics (Compulsory)	3(3-0)
PHY-702	Classical Mechanics (Compulsory)	3(3-0)
PHY-703	Quantum Mechanics (Compulsory)	3(3-0)
PHY-704	Electrodynamics (Compulsory)	3(3-0)

### Semester 2

Course Code	Course Title	Credit Hour
PHY-705	Statistical Physics (Compulsory)	3(3-0)
PHY-7xx	Graduate Level Physics Course (Elective Course I)	3(3-0)
PHY-7xx	Graduate Level Physics Course (Elective Course II)	3(3-0)
PHY-7xx	Graduate Level Physics Course (Elective Course III)	3(3-0)

### Semester 3&4

Course Code	Course Title	Credit Hours
PHY-799	Research and Thesis (Graduate Level)	6(0-6)
OR		
PHY-7xx	Two Elective courses	6(6-0)
Total Credit Hours:		30

### Elected Subjects

Course Code	Course Title	Credit Hour
PHY-701	Mathematical Methods of Physics	3(3-0)
PHY-702	Classical Mechanics	3(3-0)
PHY-703	Quantum Mechanics	3(3-0)
PHY-704	Electrodynamics	3(3-0)
PHY-705	Statistical Physics	3(3-0)
PHY-706	Material Science	3(3-0)
PHY-707	Nanoscale Physics	3(3-0)
PHY-708	Semiconductor Devices	3(3-0)
PHY-709	Materials Synthesis and Characterization	3(3-0)
PHY-710	Dielectric Physics	3(3-0)
PHY-711	Surface Physics	3(3-0)
PHY-712	Functional Materials and Devices	3(3-0)
PHY-713	Electrochemistry and Electrocatalysis	3(3-0)
PHY-714	Piezoelectric Materials and Devices	3(3-0)
PHY-715	Physics of Thin Film	3(3-0)
PHY-716	Advanced Scintillation Materials	3(3-0)
PHY-717	Advance Laser Optics	3(3-0)
PHY-718	Optoelectronics and Photonics	3(3-0)
PHY-719	Particle Physics	3(3-0)
PHY-720	Quantum Field Theory	3(3-0)
PHY-721	Group Theory	3(3-0)
PHY-722	Heavy Ion Physics	3(3-0)
PHY-723	Radiation Detection & Measurement	3(3-0)
PHY-724	Advanced Magnetic Resonance Imaging	3(3-0)
PHY-725	Spectroscopy	3(3-0)
PHY-726	Superconductivity	3(3-0)
PHY-727	Plasma Physics	3(3-0)
PHY-728	Optical Properties of Solids	3(3-0)
PHY-729	Magnetism in Condensed Matters	3(3-0)
PHY-730	Advanced Nuclear Physics	3(3-0)
PHY-731	General Relativity & Cosmology	3(3-0)
PHY-732	Advanced Computational Physics	3(3-0)

## FACULTY OF SCIENCES

### Department of Chemistry

#### Introduction

The department of chemistry was established in 2023. Chemistry is the study of matter and its transformations, providing a foundation for understanding molecules, nanostructures, and larger solids, along with their properties, reactions, and practical applications. This dynamic field is essential to numerous modern scientific and technological advances, particularly in interdisciplinary areas such as molecular genetics, nanotechnology, medicinal chemistry, drug development, and sustainable chemistry.

At GAUS, our Chemistry Department fosters a collaborative community committed to excellence in education, hands-on learning, and cutting-edge research opportunities. Our faculty brings a rich diversity of academic backgrounds, professional experiences, and research interests, which energizes our department. Covering all major fields of chemistry, analytical, inorganic, organic, physical, and applied chemistry the expertise of our faculty spans a wide range of specialties. Our curriculum is thoughtfully crafted with the Sustainable Development Goals in mind, ensuring that students receive comprehensive training in their chosen areas. Faculty members are dedicated to equipping students with the skills needed to collaborate effectively in research teams and contribute to achieving sustainability objectives.

#### Objectives

The core objectives of this department are to:

- develop outstanding professionals and academicians for the industry and the academic world.
- develop problem-solving skills, presentation skills in the scientific world.
- provide opportunities for advance research training in both the theoretical and experimental Chemistry.
- establish research collaboration with a number of well reputed national and international research centers, laboratories and chemical industries.

### Programs Being Offered

BS Chemistry

MS Chemistry

## Message From HOD



The Department of Chemistry at Grand Asian University, Sialkot, was established in 2023 with the goal of fostering a collaborative and dynamic environment dedicated to excellence in education, hands-on learning, and cutting-edge research. We are committed to becoming a globally recognized leader in chemistry education and research, focusing on innovation, industrialization, entrepreneurship, commercialization, and sustainability. Our department aspires to uphold the highest academic and professional standards, while fostering personal growth and fulfillment for both our staff and students. We aim to provide a nurturing environment that encourages continuous improvement and excellence in all our endeavors.

This department brings a wealth of academic expertise, professional experience, and diverse research interests, which energize and enrich our learning environment. Covering all major fields of chemistry—including analytical, inorganic, organic, physical, and applied chemistry—the breadth and depth of our faculty's specialties ensure that students receive a comprehensive and well-rounded education.

Our curriculum is carefully designed by keeping the intricacies of Sustainable Development Goals (SDGs) and equipping students with the skills and knowledge necessary to tackle global challenges. We prioritize training students to work effectively in research teams, with a particular focus on contributing to sustainability objectives.

Our department is committed to providing exceptional support, state-of-the-art facilities, and a rewarding learning environment that fosters both academic success and professional development.

**Syed Mazloom Hussain Shah**  
PhD Chemistry



# BS Chemistry

**Teaching Faculty**  
**Dr. Sohail Ahmed (Assistant Professor)**  
**Miss Amna Aamir (Lecturer)**  
**Miss Misharab Liaqat (Lecturer)**

## Program Summary

Admission                      Fall and Spring  
 Duration                        4 years  
 Number of Semesters       8  
 Total Credit Hours          131

## Career Prospects

- Chemical industry, Paper industry, Cement industry, Glass industry, Food industry, Agriculture industry and Pharmaceutical industry.
- Designing and properties of materials involved in energy and information technology
- Analyzing and model real world problems based on chemistry as well as other scientific principles and to solve such problems by utilizing their skills and tools.
- Nuclear energy reactor as a junior scientist in nuclear and experts in solar energy, wind energy and hydropower plants.
- Medical, Pharmaceutical I Sectors and Medical Laboratories
- PAEC Cancer hospitals as well as other medical institutes
- Teaching opportunities in schools, colleges and universities

## SCHEME OF STUDIES

### Semester 1

Course Cod	Course Title	Credit Hour
CHEM501	Inorganic Chemistry	2(2-0)
CHEM501-P	Inorganic Chemistry Lab	1(0-1)
PSY-501	Introduction to Psychology	2(2-0)
QRE-501	Quantitative Reasoning (Mathematics)	3(3-0)
ISL-501/ETHICS-501	Islamic Studies/ Religious Education/Ethics in light of Islamic/Studies only for Muslim students	2(2-0)
ENG-501	Functional English (English)	3(3-0)
BTH-501	Introduction to Biotechnology	3(3-0)

### Semester 2

Course Cod	Course Title	Credit Hour
CHEM502	Organic Chemistry	2(2-0)
CHEM502-P	Organic Chemistry Lab	1(0-1)
PHY-509	General Physics	2(2-0)
PHY-509-P	General Physics Lab	1(0-1)
CCE-501	Civics and Community Engagement	2(2-0)
ICT-501	Applications of Information and Communication Technologies (ICT) (Computer Applications)	2(2-0)
ICT-501-P	Applications of Information and Communication Technologies (ICT) (Computer Applications)	1(0-1)
QRE-502	Quantitative Reasoning (Mathematics II)	3(3-0)
ENG-502	Expository Writing (English)	3(3-0)

### Semester 3

Course Code	Course Title	Credit Hour
CHEM-503	Physical Chemistry -I	2(2-0)
CHEM-503-P	Physical Chemistry -I Lab	1(0-1)
CHEM-504	Fuel Chemistry	2(2-0)
CHEM-504-P	Fuel Chemistry Lab	1(0-1)
ENT-501	Entrepreneurship	2(2-0)
ICP-501	Ideology and Constitution of Pakistan	2(2-0)
CHEM-505	Environmental Chemistry	3(3-0)
CHEM-506	Nutritional Chemistry	3(3-0)

### Semester 4

Course Code	Course Title	Credit Hour
CHEM-507	Biochemistry	2(2-0)
CHEM-507-P	Biochemistry Lab	1(0-1)
CHEM-508	Analytical Chemistry I	2(2-0)
CHEM-508-P	Analytical Chemistry I Lab	1(0-1)
ZOO-510	Cell biology, genetics and evolution/Interdisciplinary	2(2-0)
ZOO-510-P	Cell biology, genetics and evolution/Interdisciplinary Lab	1(0-1)
BOT-509	Plant physiology and ecology/ Interdisciplinary	2(2-0)
BOT-509-P	Plant physiology and ecology/ Interdisciplinary Lab	1(0-1)
CHEM-509	Industrial Chemistry	2(2-0)
HIST-501	History	2(2-0)

## Semester 5

Course Code	Course Title	Credit Hour
CHEM-601	Inorganic Chemistry-I	2(2-0)
CHEM-601-P	Inorganic Chemistry-I Lab	1(0-1)
CHEM-602	Organic Chemistry-I	2(2-0)
CHEM-602-P	Organic Chemistry-I Lab	1(0-1)
CHEM-603	Physical Chemistry-I	2(2-0)
CHEM-603-P	Physical Chemistry-I Lab	1(0-1)
CHEM-604	Analytical Chemistry-I	2(2-0)
CHEM-604-P	Analytical Chemistry-I Lab	1(0-1)

## Semester 6

Course Code	Course Title	Credit Hour
CHEM -605	Inorganic Chemistry -III	2(2-0)
CHEM -605-P	Inorganic Chemistry -III Lab	1(0-1)
CHEM -606	Organic Chemistry -III	2(2-0)
CHEM -606-P	Organic Chemistry -III Lab	1(0-1)
CHEM -607	Physical Chemistry-III	2(2-0)
CHEM -607-P	Physical Chemistry -III Lab	1(0-1)
BTH-608	Bionanotechnology	3(3-0)

### Semester-7 (Specialization in Inorganic Chemistry)

Offer any four courses other than field experience		
Course Code	Course Title	Credit Hour
CHEM -608	Coordination Chemistry	3(3-0)
CHEM -609	Pi- acceptor ligands and Inorganic Polymers	3(3-0)
CHEM -610	Inorganic Spectroscopy	3(3-0)
CHEM -611	Instrumental Methods	3(3-0)
CHEM -612	Inorganic Reaction Mechanism	3(3-0)
CHEM-613	Advance Separation Techniques	3(3-0)
CHEM-614	Field Experience/ Internship	3(0-3)

### Semester-7 (Specialization in Organic Chemistry)

Offer any four courses other than field experience		
Course Code	Course Title	Credit Hour
CHEM-615	Heterocyclic & Organometallic Compounds	3(3-0)
CHEM-616	Fundamentals of Organometallic Compounds	3(3-0)
CHEM-617	Reactive Intermediates	3(3-0)
CHEM-618	Organic reaction Mechanism	3(3-0)
CHEM-619	Organic Spectroscopy-I	3(3-0)
CHEM-614	Field Experience/ Internship	3(0-3)

### Semester-7 (Specialization in Physical Chemistry)

Offer any four courses other than field experience		
Course Code	Course Title	Credit Hour
CHEM -620	Electrochemistry & Statistical Thermodynamics	3(3-0)
CHEM -621	Polymer Chemistry	3(3-0)
CHEM -622	Quantum Chemistry & Molecular Spectroscopy	3(3-0)
CHEM -623	Surface chemistry	3(3-0)
CHEM -624	Solution Chemistry	3(3-0)
CHEM-614	Field Experience/ Internship	3(0-3)

### Semester-8 (Specialization in Inorganic Chemistry)

Offer any four courses other than capstone project or offer any three courses other than Elective course with capstone project		
Course Code	Course Title	Credit Hour
CHEM-625	Organometallics Chemistry	3(3-0)
CHEM-626	Symmetry and Magnetochemistry	3(3-0)
CHEM-627	Radio & Nuclear Chemistry	3(3-0)
CHEM-628	Research Methodology	3(3-0)
CHEM-629	Elementary group theory	3(3-0)
CHEM-630	Alternate energy resources	3(3-0)
CHEM-631	Capstone project	3(0-3)

### Semester-8 (Specialization in Organic Chemistry)

Offer any four courses other than Capstone project		
Course Code	Course Title	Credit Hour
CHEM-632	Natural Products	3(3-0)
CHEM-633	Organic Synthesis	3(3-0)
CHEM-634	Medicinal Chemistry	3(3-0)
CHEM-635	Organic Reaction Mechanism-II	3(3-0)
CHEM-636	Organic Spectroscopy-II	3(3-0)
CHEM-628	Research Methodology	3(3-0)
CHEM-631	Capstone project	3(0-3)

### Semester-8 (Specialization in Physical Chemistry)

Offer any four courses other than Capstone project		
Course Code	Course Title	Credit Hour
CHEM637	Chemical Kinetics	3(3-0)
CHEM638	Reaction Dynamics	3(3-0)
CHEM639	Radiation & Photochemistry	3(3-0)
CHEM640	Nuclear Chemistry	3(3-0)
CHEM641	Colloids & Surface Chemistry	3(3-0)
CHEM628	Research Methodology	3(3-0)
CHEM631	Capstone project	3(0-3)
<b>Total Credit Hours</b>		<b>131</b>

## MS Chemistry

**Teaching Faculty**  
**Prof. Dr. Mukhtarul Hassan (Professor)**  
**Dr. Mazloom Shah**  
**(Associate Professor & HOD)**  
**Dr. Muhammad Imran Jamil**  
**(Assistant Professor)**

### Program Summary

Duration: 2 Year  
 Number of Semesters 4  
 Total Credit Hours 30

### Career Prospects

- Chemical industry, Paper industry, Cement industry, Glass industry, Food industry, Agriculture industry and Pharmaceutical industry.
- Designing and properties of materials involved in energy and information technology
- Analyzing and model real world problems based on chemistry as well as other scientific principles and to solve such problems by utilizing their skills and tools.
- Nuclear energy reactor as a junior scientist in nuclear and experts in solar energy, wind energy and hydropower plants.
- Medical, Pharmaceutical I Sectors and Medical Laboratories
- PAEC Cancer hospitals as well as other medical institutes
- Teaching opportunities in schools, colleges and universities

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
CHEM- 7xx	Graduate Level Chemistry Course (Elective Course I)	3(3-0)
CHEM- 7xx	Graduate Level Chemistry Course (Elective Course II)	3(3-0)
CHEM- 7xx	Graduate Level Chemistry Course (Elective Course III)	3(3-0)
CHEM- 7xx	Graduate Level Chemistry Course (Elective Course IV)	3(3-0)

### Semester 2

Course Code	Course Title	Credit Hour
CHEM- 7xx	Graduate Level Chemistry Course (Elective Course I)	3(3-0)
CHEM- 7xx	Graduate Level Chemistry Course (Elective Course II)	3(3-0)
CHEM- 7xx	Graduate Level Chemistry Course (Elective Course III)	3(3-0)
CHEM- 7xx	Graduate Level Chemistry Course (Elective Course IV)	3(3-0)

### Semester 3&4

Course Code	Course Title	Credit Hour
CHEM-763	Research and Thesis	6(0-6)
Total Credit Hours:		30

## Elective Courses

Course Code	Course Title	Credit Hour
<b>General Courses</b>		
CHEM-701	Research Methodologies	3(3-0)
CHEM-707	Chemical Education	3(3-0)
CHEM-708	Computational Chemistry	3(3-0)
CHEM-709	Statistical Data Handling and Mathematics	3(3-0)
CHEM-710	Assessment in Higher Education	3(3-0)
CHEM-711	Forensic Chemistry	3(3-0)
<b>Courses of Inorganic/Analytical Chemistry</b>		
CHEM-702	Advanced Spectroscopic Techniques	3(3-0)
CHEM-703	Solid State Chemistry	3(3-0)
CHEM-704	Chemistry of Organometallics	3(3-0)
CHEM-705	Advanced Chromatographic Techniques	3(3-0)
CHEM-706	Inorganic electronic spectroscopy	3(3-0)
CHEM-712	Kinetics and Mechanisms of Inorganic Reactions	3(3-0)
CHEM-713	Bioanalytical Chemistry	3(3-0)
CHEM-714	Metal-based drugs	3(3-0)
CHEM-715	Nanochemistry	3(3-0)
CHEM-716	Green Chemistry Techniques	3(3-0)
CHEM-717	Thermal Analysis	3(3-0)
CHEM-718	Validation of Analytical Methods	3(3-0)
CHEM-719	Nuclear medicine	3(3-0)
CHEM-720	Food, pharmaceutical and Forensic analysis	3(3-0)
CHEM-721	Advanced Electroanalytical Techniques	3(3-0)
CHEM-722	Inorganic Material Chemistry	3(3-0)
CHEM-723	Characterization of Natural Antioxidants and Essential Oils	3(3-0)

## Elective Courses

<b>Courses of Organic Chemistry</b>		
CHEM-724	Natural Products Chemistry	3(3-0)
CHEM-725	Synthetic Applications of Named Reactions	3(3-0)
CHEM-726	Advanced Spectroscopy	3(3-0)
CHEM-727	Advanced Heterocyclic Chemistry	3(3-0)
CHEM-728	Organic Polymer Chemistry	3(3-0)
CHEM-729	Pharmaceutical Chemistry	3(3-0)
CHEM-730	Supramolecular Chemistry	3(3-0)
CHEM-731	Phytochemical Techniques	3(3-0)
CHEM-732	Modern Trends in Asymmetric Synthesis	3(3-0)
CHEM-733	Advanced Stereochemistry	3(3-0)
CHEM-734	Pericyclic Chemistry	3(3-0)
CHEM-735	Organic Compounds containing S, P & Si	3(3-0)
CHEM-736	Dyes and Pigments	3(3-0)
CHEM-737	Physical Organic Chemistry	3(3-0)
<b>Courses of Physical Chemistry</b>		
CHEM-738	Polymers and Advanced Composite Materials	3(3-0)
CHEM-739	Advanced Quantum Chemistry	3(3-0)
CHEM-740	Advanced Photochemistry and Radiation Chemistry	3(3-0)
CHEM-741	Advanced Electrochemistry	3(3-0)
CHEM-742	Surface Chemistry	3(3-0)
CHEM-743	Advanced Statistical Thermodynamics	3(3-0)
CHEM-744	Biophysical Chemistry	3(3-0)
CHEM-745	Chemistry of Atmosphere	3(3-0)
CHEM-746	Advanced Solid State Chemistry and Characterization Techniques	3(3-0)
CHEM-747	Advanced Reactions Dynamics	3(3-0)
CHEM-748	Nanomaterials	3(3-0)



## Elective Courses

<b>Courses of Applied Chemistry</b>		
CHEM-751	Environmental Impact of Chemical Industries	3(3-0)
CHEM-752	Nanomaterials and their applications	3(3-0)
CHEM-753	Chemistry of Dyes and Pigments	3(3-0)
CHEM-754	Pharmaceutical Chemistry	3(3-0)
CHEM-755	Advanced Polymer Chemistry	3(3-0)
CHEM-756	Agrochemicals	3(3-0)
CHEM-757	Physical Structure of Porous Materials	3(3-0)
CHEM-758	Industrial Process Chemistry	3(3-0)
CHEM-759	Advances in Petrochemical Industries	3(3-0)
CHEM-760	Coal Gasification and Liquefaction Alternative Fuels	3(3-0)
CHEM-761	Nuclear Fuel Processing and waste management	3(3-0)
CHEM-762	Alternative Energy Sources	3(3-0)

Note: Any other course according to the availability of facilities, expertise in the institution may be offered.

## FACULTY OF SCIENCES

### Department of Mathematics

#### Introduction

The importance of Mathematics is due to its increasing effectiveness in step with the new developments in sciences. The challenges of staying updated are absolutely essential. We are living in an era where digital system has become an integral part of our daily day life. Beyond the imagination and speculation, one can't comprehend the concepts in Engineering Sciences, Physics, Computer Sciences, Management Sciences and Social Sciences without Mathematics. The Department of Mathematics at GAUS was launched with the aim of preparing students and researchers in Mathematics with a width of knowledge of the other sciences and technologies. The department offers BS Mathematics, MS Mathematics and PhD Mathematics programs.

We have faculty members who are actively working in broad range of areas in pure applied and computational mathematics with high standards of research. The main purpose of this department is to strive to create a vibrant academic environment that nurtures critical thinking and problem-solving skills in mathematics and equip students with the knowledge and expertise to apply their mathematical skills across a variety of interdisciplinary domains, preparing them to tackle real-world challenges with confidence and creativity.

#### Objectives

The core objectives of this department are to:

- provide students with an in-depth understanding of advanced mathematical theories and concepts.
- cultivate exceptional problem-solving skills in students through rigorous coursework, seminars, and research projects.
- encourage students to contribute to mathematical literature by publishing research findings in reputable journals, presenting papers at conferences, and collaborating with other researchers in the field.
- engage students in collaboration with fellow researchers, both within their institution and in the broader mathematical community.
- develop essential professional skills in students that include critical thinking, time management, project planning, data analysis, presentation skills, and scientific writing.

#### Programs Being Offered

ADP Mathematics

BS Mathematics

MS Mathematics

PhD Mathematics

## Message From HOD



Mathematics plays an increasingly central role in the advancement of science and technology, making it one of the most important fields of study today. As we witness rapid developments in various scientific disciplines, the relevance of mathematics grows in tandem. In our modern world, where digital systems are integrated into every aspect of our daily lives, the concepts behind Engineering Sciences, Physics, Computer Sciences, Management Sciences, and even Social Sciences would be unimaginable without the foundation provided by mathematics. It is the backbone that drives innovation, enabling us to understand and solve complex problems.

The Department of Mathematics at Grand Asian University, Sialkot, was established with the vision of preparing students and researchers who possess a deep understanding of mathematics as well as its applications across various domains.

We offer a comprehensive range of programs, including ADP, BS, MS and PhD in Mathematics, each designed to provide students with a solid foundation in both the fundamental and advanced aspects of the subject.

Our esteemed faculty members, who are experts in a wide range of mathematical disciplines, are committed to upholding the highest standards of teaching and research. They actively engage in research in areas such as pure, applied, and computational mathematics, ensuring that our students are exposed to the latest developments and discoveries. The department fosters a dynamic environment for mathematical research and collaboration, connecting scholars and researchers from around the globe.

At GAUS, we are dedicated to shaping the next generation of mathematicians, researchers, and professionals who will lead the way in solving the most pressing challenges of the future.

**Prof. Dr. Akbar Azam**  
PhD Mathematics

## ADP Mathematics

**Teaching Faculty**  
**Prof. Dr. Akbar Azam**  
**Head of Department**  
**Dr. Aqeel Shahzad**  
 (Assistant Professor)  
**Dr. Naimul Baasat**  
 (Assistant Professor)  
**Dr. Aniq** (Assistant Professor)

**Mr. Shafqat-ur-Rehman**  
 (Assistant Professor)  
**Muhammad Bilal** (Lecturer)  
**Usman Younas** (Lecturer)  
**Saima Atif** (Lecturer)

### Program Summary

**Duration:** 2 Year  
**Number of Semesters:** 4  
**Total Credit Hours:** 66

### Career Prospects

- Research and Development Organizations
- Economic Research Firms
- Market Research and Manufacturing Organizations
- Teaching Opportunities in Schools, Colleges and Universities
- Accountant, Actuary, Statistician, Economist and Market Researcher
- Quantitative Risk Analyst, Treasury Management Specialist and Demographer
- Defense Research and Development Organizations
- Pakistan Space Research Organizations
- Reputed Software Companies
- Banks and Insurance Companies
- Provincial Public Services and Federal Public Services

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
MTH-501	Calculus-I	3(3-0)
ENG-501	Functional English	3(3-0)
ICT-501	Applications of Information and Communication Technologies	2(2-0)
ICT-501 P	Applications of Information and Communication Technologies Lab	1(0-1)
QRE-501	Quantitative Reasoning I	3(3-0)
ISL-501	Islamic Studies	2(2-0)
PSY-500	Introduction to Psychology	2(2-0)

### Semester 2

Course Code	Course Title	Credit Hour
MTH -502	Calculus -II	3(3-0)
ENG -502	Expository Writing	3(3-0)
CCE -501	Civics and Community Engagement	2(2-0)
QRE -502	Quantitative Reasoning -II	3(3-0)
ICP -501	Ideology and Constitution of Pakistan	2(2-0)
ENT -501	Entrepreneurship	2(2-0)

### Semester 3

Course Code	Course Title	Credit Hour
PHY -513	Fundamental Physics	3(3-0)
MTH -506	Programming Languages for Mathematicians	3(3-0)
ENG -503	Creative Writing	2(2-0)
MTH -503	Calculus -III	3(3-0)
MTH -529	Classical Mechanics	3(3-0)
STS -501	Probability Distribution -I	3(3-0)

### Semester 4

Course Code	Course Title	Credit Hour
MTH-524	Number Theory	3(3-0)
PHY-505	Heat and Thermodynamics	3(3-0)
MTH-513	Computing Tools for Mathematicians	3(3-0)
MTH-528	Linear Algebra-I	3(3-0)
MTH-521	Discrete Mathematics	3(3-0)
STS-502	Probability Distribution II	3(3-0)
THQ-501	Teaching of Holy Quran	Non credit
<b>Total Credit Hours</b>		<b>66</b>

# BS Mathematics

**Teaching Faculty**  
**Dr. Aqeel Shahzad**  
 (Assistant Professor)  
**Dr. Naimul Baasat**  
 (Assistant Professor)  
**Dr. Aniq**  
 (Assistant Professor)

**Mr. Shafqat-ur-Rehman**  
 (Assistant Professor)  
**Muhammad Bilal (Lecturer)**  
**Usman Younas (Lecturer)**  
**Saima Atif (Lecturer)**

## Career Prospects

- Research and Development Organizations
- Economic Research Firms
- Market Research and Manufacturing Organizations
- Teaching Opportunities in Schools, Colleges and Universities
- Accountant, Actuary, Statistician, Economist and Market Researcher
- Quantitative Risk Analyst, Treasury Management Specialist and Demographer
- Defense Research and Development Organizations
- Pakistan Space Research Organizations
- Reputed Software Companies
- Banks and Insurance Companies
- Provincial Public Services and Federal Public Services

## Program Summary

Duration 4 Year  
 Number of Semesters 8  
 Total Credit Hours 126

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
MTH-501	Calculus I	3(3-0)
ENG-501	Functional English	3(3-0)
ICT-501	Applications of Information and Communication Technologies	2(2-0)
ICT-501P	Applications of Information and Communication Technologies Lab	1(0-1)
QRE-501	Quantitative Reasoning	3(3-0)
ISL-501	Islamic Studies	2(2-0)
PSY-500	Introduction to Psychology	2(2-0)

### Semester 2

Course Code	Course Title	Credit Hour
MTH -502	Calculus -II	3(3-0)
ENG -502	Expository Writing	3(3-0)
CCE -501	Civics and Community Engagement	2(2-0)
QRE -502	Quantitative Reasoning -II	3(3-0)
ICP -501	Ideology and Constitution of Pakistan	2(2-0)
ENT -501	Entrepreneurship	2(2-0)

### Semester 3

Course Code	Course Title	Credit Hour
PHY -513	Fundamental Physics	3(3-0)
MTH -506	Programming Languages for Mathematicians	3(3-0)
ENG -503	Creative writing	2(2-0)
MTH -503	Calculus -III	3(3-0)
MTH -529	Classical Mechanics	3(3-0)
STS -501	Probability Distribution -I	3(3-0)

### Semester 4

Course Code	Course Title	Credit Hour
MTH-524	Number Theory	3(3-0)
PHY-505	Heat and Thermodynamics	3(3-0)
MTH-513	Computing Tools for Mathematicians	3(3-0)
MTH-528	Linear Algebra I	3(3-0)
MTH-521	Discrete Mathematics	3(3-0)
STS-502	Probability Distribution II	3(3-0)
THQ-501	Teaching of Holy Quran	Non credit

### Semester 5

Course Code	Course Title	Credit Hour
MTH-602	Real Analysis-I	3(3-0)
MTH-640	Differential Geometry-I	3(3-0)
MTH-622	Complex Analysis	3(3-0)
MTH-651	Numerical Analysis I	3(3-0)
MTH-601	Linear Algebra-II	3(3-0)

### Semester 6

Course Code	Course Title	Credit Hour
MTH-630	Group Theory	3(3-0)
MTH-603	Real Analysis -II	3(3-0)
MTH-607	Ordinary Differential Equations	3(3-0)
MTH-641	Differential Geometry -II	3(3-0)
MTH-652	Numerical Analysis -II	3(3-0)



## Semester 7

Course Code	Course Title	Credit Hour
MTH-627	Functional Analysis	3(3-0)
MTH-613	Partial Differential Equations	3(3-0)
MTH-611	Vector and Tensor Analysis	3(3-0)
MTH-628	Set Topology	3(3-0)
MTH-6xx	Specialization Course I	3(3-0)

## Semester 8

Course Code	Course Title	Credit Hour
MTH-634	Measure Theory	3(3-0)
MTH-643	Integral Equations	3(3-0)
MTH-615	Methods of Mathematical Physics	3(3-0)
MTH-631	Rings and Fields	3(3-0)
MTH-6xx	Specialization Course II	3(3-0)
Total Credit Hours		126

## MS Mathematics

### Teaching Faculty

**Dr. Aqeel Shahzad (Assistant Professor)**  
**Dr. Naimul Baasat (Assistant Professor)**  
**Dr. Aniq (Assistant Professor)**  
**Mr. Shafqat-ur-Rehman (Assistant Professor)**

### Program Summary

Duration: 2 Year  
 Number of Semesters 4  
 Total Credit Hours 30

### Career Prospects

- Research and Development Organizations
- Economic Research Firms
- Market Research and Manufacturing Organizations
- Teaching Opportunities in Schools, Colleges and Universities
- Accountant, Actuary, Statistician, Economist and Market Researcher
- Quantitative Risk Analyst, Treasury Management Specialist and Demographer
- Defense Research and Development Organizations
- Pakistan Space Research Organizations
- Reputed Software Companies
- Banks and Insurance Companies
- Provincial Public Services and Federal Public Services

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
MTH-701	Advanced Integral Equations and Applications	3(3-0)
MTH-702	Advanced Functional Analysis	3(3-0)
MTH-xxx	Optional Course	3(3-0)
MTH-xxx	Optional Course	3(3-0)

### Semester 2

Course Code	Course Title	Credit Hour
MTH-xxx	Optional Course	3(3-0)
MTH-xxx	Optional Course	3(3-0)
MTH-704	Fixed Point Theory and Applications	3(3-0)
MTH-709	Advanced Partial Differential Equations	3(3-0)

### Semester 3&4

Course Code	Course Title	Credit Hour
MTH-774	Research and Thesis	6(0-6)
Total Credit Hours		30

## PhD Mathematics

**Teaching Faculty**  
**Prof. Dr. Akbar Azam** Head of Department  
**Dr. Aqeel Shahzad** (Assistant Professor)  
**Dr. Naimul Baasat** (Assistant Professor)  
**Dr. Aniq** (Assistant Professor)

### Program Summary

Duration 3 Year  
 Number of Semesters 6  
 Total Credit Hours 30

### Career Prospects

- Research and Development Organizations
- Economic Research Firms
- Market Research and Manufacturing Organizations
- Teaching Opportunities in Schools, Colleges and Universities
- Accountant, Actuary, Statistician, Economist and Market Researcher
- Quantitative Risk Analyst, Treasury Management Specialist and Demographer
- Defense Research and Development Organizations
- Pakistan Space Research Organizations
- Reputed Software Companies
- Banks and Insurance Companies
- Provincial Public Services and Federal Public Services

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
MTH -xxx	Optional course -I	3(3-0)
MTH -802	Advanced Theory of Semirings	3(3-0)
MTH -804	Advanced Partial Differential Equations and Applications	3(3-0)

### Semester 2

Course Code	Course Title	Credit Hour
MTH -xxx	Optional course -II	3(3-0)
MTH -805	Advanced Fixed Point theory and Applications	3(3-0)
MTH -803	Advanced Mathematical Techniques	3(3-0)

### Semester 3-4-5-6

Course Code	Course Title	Credit Hour
MTH -820	Research and Thesis	12(0 -12)
Total Credit Hours		30

### Elective Courses

Course Code	Course Title	Credit Hour
MTH -701	Advanced Integral Equations and Applications	3(3-0)
MTH -702	Advanced Functional Analysis	3(3-0)
MTH -703	Advanced Mathematical Physics	3(3-0)
MTH -704	Fixed Point Theory and Applications	3(3-0)
MTH -705	Numerical Solution of ODEs	3(3-0)
MTH -706	Advanced Numerical Analysis	3(3-0)
MTH -707	Numerical Linear Algebra	3(3-0)

## Elective Courses

MTH-708	Optimization Theory	3(3-0)
MTH-709	Advanced Partial Differential Equations	3(3-0)
MTH-710	Variational Inequalities & Applications	3(3-0)
MTH-711	Integral Inequalities	3(3-0)
MTH-712	Numerical Solutions of PDEsI	3(3-0)
MTH-713	Perturbation Methods	3(3-0)
MTH-714	Rings and Modules	3(3-0)
MTH-715	Advanced Mathematical Statistics	3(3-0)
MTH-716	Time Series analysis and Forecasting	3(3-0)
MTH-717	Linear Statistics Models	3(3-0)
MTH-718	Advanced Topics in Graph Theory	3(3-0)
MTH-719	Commutative Algebra	3(3-0)
MTH-720	Advanced Topology-I	3(3-0)
MTH-721	Algebraic Topology	3(3-0)
MTH-722	Mathematical Analysis	3(3-0)
MTH-723	General Relativity	3(3-0)
MTH-724	Probability Models and Application	3(3-0)
MTH-725	Numerical Optimization	3(3-0)
MTH-726	Introductory Cryptography	3(3,0)
MTH-727	Complexity Theory	3(3-0)
MTH-728	Finite Fields	3(3-0)
MTH-729	Fuzzy Logic and Applications	3(3-0)
MTH-730	Fuzzy Probability and Statistics	3(3-0)
MTH-731	Topology	3(3-0)
MTH-732	Geometric Function Theory	3(3-0)
MTH-733	Advanced Convex Analysis	3(3-0)
MTH-734	Advanced Modern Algebra with Applications	3(3-0)
MTH-735	Theory of Groups	3(3-0)
MTH-736	Representation Theory of Finite Groups	3(3-0)
MTH-737	Field Extensions and Galois Theory	3(3-0)
MTH-738	Advanced Topology II	3(3-0)
MTH-740	Differential Subordinations and Applications	3(3-0)
MTH-741	Convolutions in Geometric Function Theory	3(3-0)
MTH-742	Semigroup Theory	3(3-0)
MTH-743	Further Algebraic Geometry	3(3-0)
MTH-744	Lattice Boltzmann Transport Method	3(3-0)
MTH-746	Homological Algebra	3(3-0)
MTH-747	Relativistic Theory of Black Holes	3(3-0)
MTH-748	Classical Theory of Fields	3(3-0)

## Elective Courses

MTH-803	Advanced Mathematical Techniques	3(3-0)
MTH-804	Advanced Partial Differential Equations and Applications	3(3-0)
MTH-805	Advanced Fixed Point theory and Applications	3(3-0)
MTH-806	Mathematical Techniques for B.V Problems	3(3-0)
MTH-807	Non-Newtonian Fluid Mechanics	3(3-0)
MTH-808	Spectrum Methods in Fluid Dynamics	3(3-0)
MTH-809	Topics in Applied Mathematics	3(3-0)
MTH-810	Topics in Pure Mathematics	3(3-0)
MTH-811	Topics in Numerical Mathematics	3(3-0)
MTH-812	Simple Linear Regression Model	3(3-0)
MTH-813	Multiple Linear Regression Model	3(3-0)
MTH-814	Topics in Mathematics Statistics	3(3-0)
MTH-815	Topics in Applied Commutative Algebra	3(3-0)
MTH-816	Advanced Topics in Graph Valuation Theory	3(3-0)
MTH-817	Numerical Methods for Incompressible Flows	3(3-0)
MTH-818	Topics in Graph Valuations	3(3-0)
MTH-819	Numerical Methods for Variational Inequalities	3(3-0)
MTH-820	PhD Research and Thesis	12(0-12)

## FACULTY OF SCIENCES

### Department of Social Sciences

#### Introduction

The Department of Social Sciences warmly welcomes the students in this prestigious institution. This university is committed to provide a healthy and supportive environment for quality education with esteemed faculty members having experiences from renowned institutes. The Department of Social Sciences offers a comprehensive curriculum in English, Psychology, Sociology, Islamic Studies and Education, designed to equip learners with critical thinking and analytical skills, essential for today's world. Your time at GAUS and in the Social Sciences Department is both meaningful and pleasant.

The Department of Social Sciences empowers our students to understand human behavior, social structures and relationships by offering undergraduate programs in English, Psychology, Sociology, Islamic Studies, Education and Sports & Rehabilitation. Our expert faculty, cutting-edge curriculum, and research opportunities equip undergraduates for successful careers in social services, education and research organizations.

#### Objectives

The core objectives of this department are to:

- produce well-rounded young professionals with sound and deep knowledge of Linguistics, Literature, Psychology, Sociology, Islamic Studies and Education.
- encourage the development of communication and presentation skills.
- develop skills and scientific approach to understand behavior, social norms and values and social problems in society.
- offer knowledge of basic Islamic Sciences such as al-Quran, al-Hadith, al-Fiqh, Islamic History, Islamic Thought, Seerah, Islamic Culture and Civilization and to create better understanding of Islam and contemporary challenges faced by the Muslim Ummah

#### Programs Being Offered

ADP English

ADP Sociology

ADP Psychology

ADP Sports and Rehabilitation

ADP Education

ADP Islamic Studies



## Message From HOD



The Department of Social Sciences warmly welcomes to the students in our prestigious institution. This university is committed to provide a healthy and supportive environment for quality education, guided by our esteemed faculty members who are having experiences of renowned institutes. Our programs offer a comprehensive curriculum in English, Psychology, Sociology, Islamic Studies and Education, designed to equip you with critical thinking and analytical skills essential for today's world. Upon completing your degree, you surely will emerge as a skilled and impactful professionals instilled with all the competitive capabilities required to be the most useful persons in your fields. The Department of Social Sciences empowers our students to understand human behavior, social structures and relationships by offering undergraduate programs in English, Psychology, Sociology, Islamic Studies, Education and Sports & Rehabilitation. Our expert faculty, cutting-edge curriculum, and research opportunities equip undergraduates for successful careers in social services, education and research organizations.

**Prof. Dr. Iqbal Butt**  
PhD English

## ADP English

**Teaching Faculty**  
**Dr. Muhammad Iqbal Butt**  
 (Head of Department and Professor)  
**Dr. Muhammad Waleed Butt** (Assistant Professor)  
**Hafiz Muhammad Qasim** (Lecturer)  
**Ms Bushra Shahid** (Lecturer)  
**Ms Khadija Zain**  
**Nadia Anum**

**Program Summary**  
 Admission Fall & Spring  
 Duration 2 Years  
 Total Semesters 4  
 Total Credit Hours 66

### Career Prospects

- English Teacher/ Lecturer
- Writer/ Journalist
- Copy writer
- Language Interpreter/Translator
- Researcher (Literary/Linguistic)
- Content Writer

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ENG -501	Functional English	3 (3-0)
ICT -501	Applications of Information & Communication Technologies	2(2-0)
ICT -501 P	Applications of Information & Communication Technologies Lab	1(0-1)
HIS -501	History	2 (2-0)
PSY -500	Introduction to Psychology	2 (2-0)
ICP -501	Ideology & Constitution of Pakistan	2 (2-0)
ELL -501	Introduction to Linguistics	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG -502	Expository Writing	3 (3-0)
ES -501	Introduction to Environmental Science	3 (3-0)
CCE -501	Civics & Community Engagement	2 (2-0)
ISL -501	Islamic Studies	2 (2-0)
ENT -501	Entrepreneurship	2 (2-0)
ELL -502	Introduction to Literature	3 (3-0)

### Semester 3

Course Code	Course Title	Credit Hour
QRE-501	Quantitative ReasoningI	3 (3-0)
EDU-501	Foundations of Education	3 (3-0)
ELL-503	Classical Poetry	3 (3-0)
ELL-504	Prose	3 (3-0)
ELL-505	Applied Linguistics	3 (3-0)
ELL-506	Sociolinguistics	3 (3-0)

### Semester 4

Course Code	Course Title	Credit Hour
QRE-502	Quantitative ReasoningII	3 (3-0)
POL-501	Introduction to Political Science	3 (3-0)
ELL-507	Classical Drama	3 (3-0)
ELL-508	Short Fictional Narratives	3 (3-0)
ELL-509	Morphology	3 (3-0)
ELL- 510	Syntax	3 (3-0)
THQ-501	Teaching of Holy Quran	0
	<b>Total Credit Hours</b>	<b>66</b>

## ADP Psychology

**Teaching Faculty**  
**Ms Pulwasha Arif (Lecturer)**  
**Ms Zainab Najam (Lecturer)**

### Program Summary

Admission                      Fall & Spring  
 Duration                        2 Years  
 Total Semesters                4  
 Total Credit Hours              66

### Career Prospects

- Behavioral Therapist
- Substance Abuse Counselor
- Teacher/Educator
- Youth Counselor

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3(3-0)
ICT-501	Applications of Information & Communication Technology	2(2-0)
ICT-501P	Applications of Information & Communication Technology	1(0-1)
SOG-501	Introduction to Sociology	2(2-0)
ICP-501	Ideology of Pakistan studies and Constitution	2(2-0)
HIS-501	Introduction to History	2(2-0)
PSY-500	Introduction to Psychology	3(3-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG -502	Expository Writing	3(3-0)
ES-501	Introduction to Environmental Science	3(3-0)
ES-501	Entrepreneurship	2(2-0)
CCE -501	Civics & Community Engagement	2(2-0)
ISL-501	Islamic Studies	2(2-0)
PSY - 502	Introduction to Psychology -II	3(3-0)

### Semester 3

Course Code	Course Title	Credit Hour
ANT-501	Introduction to Anthropology	3(3-0)
QRE-501	Quantitative Reasoning-I	3(3-0)
PSY- 503	Gender issues in Psychology	3(3-0)
PSY-504	Applied Psychology	3(3-0)
PSY-505	History of Psychology	3(3-0)
PSY -506	Educational Psychology	3(3-0)

### Semester 4

Course Code	Course Title	Credit Hour
QRE-502	Quantitative Reasoning II	3(3-0)
POL-501	Introduction to Political Science	3(3-0)
PSY-507	Moral development	3(3-0)
PSY-508	Mental Health & Psychopathology	3(3-0)
PSY-509	Health Psychology	3(3-0)
PSY-510	Developmental Psychology	3(3-0)
THQ-501	Teaching of Holy Quran	0
<b>Total Credit Hours</b>		<b>66</b>

## ADP Sociology

### Teaching Faculty

Ms Iram Shabbir (Lecturer)

Ms Nadia Anam (Lecturer)

Ms Maham Razzaq (Lecturer)

### Career Prospects

- Social Researcher
- Policy Analyst
- Community Organizer
- Urban Planner
- Social Worker
- Teacher/Educator

### Program Summary

Admission	Fall & Spring
Duration	2 Years
Total Semesters	4
Total Credit Hours	66

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3(3-0)
ICT-501	Applications of Information & Communication Technologies	2(2-0)
ICT-501 P	Applications of Information & Communication Technologies Lab	1(0-1)
HIS-501	History	2(2-0)
PSY-500	Introduction to Psychology	2(2-0)
ICP-501	Ideology & Constitution of Pakistan	2(2-0)
SOC-501	Introduction to Sociology	3(3-0)

### Semester 3

Course Code	Course Title	Credit Hour
QRE-501	Quantitative Reasoning-I	3 (3-0)
EDU-501	Foundations of Education	3 (3-0)
SOC-503	Development of Social thought	3 (3-0)
SOC-504	Sociological Theory-I	3 (3-0)
SOC-505	Political Sociology	3 (3-0)
SOC-506	Urban Sociology	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3 (3-0)
ES-501	Introduction to Environmental Science	3 (3-0)
CCE501	Civics & Community Engagement	2 (2-0)
ISL-501	Islamic Studies	2 (2-0)
ENT-501	Entrepreneurship	2 (2-0)
SOC-502	Introduction to Sociology	3 (3-0)

### Semester 4

Course Code	Course Title	Credit Hour
QRE-502	Quantitative Reasoning-II	3 (3-0)
POL-501	Introduction to Political Science	3 (3-0)
SOC-507	Sociological Theory-II	3 (3-0)
SOC-508	Gender Studies	3 (3-0)
SOC-509	Criminology	3 (3-0)
SOC-510	Rural Sociology	3 (3-0)
THQ-501	Teaching of Holy Quran	0
<b>Total Credit Hours</b>		<b>66</b>

## ADP Education

**Teaching Faculty**  
**Ms Huma Bilal (Lecturer)**  
**Ms Khadija Zain (Lecturer)**

### Program Summary

Admission Fall & Spring  
 Duration 2 Years  
 Total Semesters 4  
 Total Credit Hours 66

### Career Prospects

- Teacher/Educator
- Curriculum Developer
- Educational Consultant
- School Administrator

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3 (3-0)
ICT-501	Applications of Information & Communication Technologies	2(2-0)
ICT-501 P	Applications of Information & Communication Technologies Lab	1(0-1)
HIS-501	History	2 (2-0)
PSY-500	Introduction to Psychology	2 (2-0)
ICP- 501	Ideology & Constitution of Pakistan	2 (2-0)
EDU-501	Basics of Education	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3 (3-0)
ES-501	Introduction to Environmental Science	3 (3-0)
CCE -501	Civics & Community Engagement	2 (2-0)
ISL-501	Islamic Studies	2 (2-0)
ENT-501	Entrepreneurship	2 (2-0)
EDU-502	Introduction to Physical Education	3(3-0)

### Semester 3

Course Code	Course Title	Credit Hour
QRE-501	Quantitative Reasoning I	3 (3-0)
ANT-501	Introduction to Anthropology	3 (3-0)
EDU-503	Introduction to Special Education	3 (3-0)
EDU-504	Teaching of Social Studies	3 (3-0)
EDU-504	Child Development	3 (3-0)
EDU-505	Teaching Profession	3 (3-0)

### Semester 4

Course Code	Course Title	Credit Hour
QRE502	Quantitative Reasoning II	3 (3-0)
POL501	Introduction to Political Science	3 (3-0)
EDU506	Classroom Management	3 (3-0)
EDU507	Environmental Education	3 (3-0)
EDU508	Art, Craft & Calligraphy	3 (3-0)
EDU509	Teaching Literacy Skills	3 (3-0)
THQ501	Teaching of Holy Quran	0
<b>Total Credit Hours</b>		<b>66</b>



## ADP Islamic Studies

**Teaching Faculty**  
**Dr. Imtiaz Ahmad**  
 (Associate Professor)  
**Mr. Muhammad Asif (Lecturer)**

**Program Summary**

Admission                      Fall & Spring  
 Duration                        2 Years  
 Total Semesters              4  
 Total Credit Hours          66

**Career Prospects**

- Islamic Educator/Teacher
- Islamic Scholar/Researcher
- Community Leader/ Activist
- Islamic Counselor
- Writer/Journalist (Islamic Publication)

### SCHEME OF STUDIES

#### Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3 (3-0)
ICT-501	Introduction to Computer Applications	2(2-0)
ICT-501P	Introduction to Computer Applications	1(0-1)
HIS-501	History	2 (2-0)
PSY-500	Introduction Psychology	2 (2-0)
ICP-501	Ideology & Constitution of Pakistan	2 (2-0)
ISL-501	Arabic Language	3 (3-0)

#### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3(3-0)
ES-501	Introduction to Environmental Science	3 (3-0)
CCE-501	Civics & Community Engagement	2 (2-0)
ISL-501	Islamic Studies	2 (2-0)
ENT-501	Entrepreneurship	2 (2-0)
ISL-502	Arabic Language-II	3 (3-0)

#### Semester 3

Course Code	Course Title	Credit Hour
QRE-501	Quantitative Reasoning-I	3 (3-0)
EDU- 501	Foundations of Education	3 (3-0)
ISL- 503	Textual Study of Holy Quran	3 (3-0)
ISL-504	Arabic Language-III	3 (3-0)
ISL- 505	Research Methods in Islamic Studies-I	3 (3-0)
ISL-506	Introduction to Fiqh	3 (3-0)

#### Semester 4

Course Code	Course Title	Credit Hour
QRE-502	Quantitative Reasoning-II	3 (3-0)
POL- 501	Introduction to Political Science	3 (3-0)
ISL- 507	Textual Study of Fiqh	3 (3-0)
ISL- 508	Hadiith-I	3 (3-0)
ISL- 509	Research Methods in Islamic StudiesII	3 (3-0)
ISL-510	Religion and Politics	3 (3-0)
THQ-501	Teaching of Holy Quran	00
<b>Total Credit Hours</b>		<b>66</b>

# FACULTY OF SCIENCES

## Department of Computer Science & Software Engineering

### Introduction

The Department of Computer Science and Software Engineering feels honored to focus on qualitative growth of students through devising innovative, realistic, market-oriented challenges and correct solutions to real life problems. At present three level programs are offered to the students. Masters in Computer and Data Science, Bachelor degrees in Computer Science and Software Engineering and Associate degrees programs in all fields of computing are available. The Department of Computer Science and Software Engineering is established with top-of-the-line infrastructure having state of the art computer labs, multimedia equipped temperature conditioned class rooms, highly qualified faculty, HEC approved curricula and programs being accredited from NCEAC. Our students are bringing laurels by winning competitions and refining skills through technological clubs, like, Free Lancing, Digital Marketing, Functional and Visual front and back-end programming, Developing Android Applications and Games, expertise in Artificial Intelligence and cyber security. The Department of Computer Science & Software Engineering works with a clear mission to provide the country with trained resources for developing high-tech products and services and to exercise commercialization through the incubation of high-tech companies.

### Objectives

The core objectives of this department are to:

- identify, analyze, and solve the problems.
- produce the best quality computer scientists, IT professionals, and researchers by providing state-of-the-art training, hands-on experience, and a healthy research environment.
- collaborate with industry and academia around the globe to achieve quality technical education and excellence in research through active participation of all the stakeholders.
- exercise commercialization through the incubation of high-tech companies.

## Programs Being Offered

ADP Information Technology

ADP Cyber Security

ADP Data Science

ADP Data Base Management Science

ADP Artificial Intelligence

ADP Computer Science

ADP Software Development

ADP in Web Design & Development

BS Computer Science

BS Software Engineering

MS Computer Science

MS Data Science

## Message From HOD



The Department of Computer Science & Software Engineering at Grand Asian University, Sialkot, is driven by a clear mission: to equip the students with highly skilled professionals capable of developing cutting-edge products and services while fostering commercialization through the incubation of high-tech companies. Through a robust combination of degree programs, research initiatives, and innovative development, our graduates emerge as highly competent professionals and entrepreneurs, ready to make a significant societal impact.

We believe in fostering a culture of innovation and intellectual curiosity, empowering students to become agile learners and critical thinkers. By equipping them with a strong foundation in theoretical concepts, hands-on practical skills, and exposure to the latest technologies, we prepare our graduates to excel in the competitive landscape of the 21st century.

As prospective students of this dynamic and rapidly evolving domain, I warmly welcome you to join us. I urge you to embrace this journey with vigor, determination, and a commitment to achieving excellence. The field of computer science and software engineering demands adaptability, creativity, and relentless pursuit of knowledge—traits that we cultivate in our students to ensure their success.

Together, let us shape the future of technology and innovation, leaving a legacy of progress and excellence.

**Prof. Brig. Dr. Tanvir Ahmad**  
PhD Computer Science  
Sitara-e-Imtiaz (M)

## ADP Information Technology (IT)

**Teaching Faculty**  
 Dr. Sohaib Latif (Associate Professor)  
 Dr. Sajid Khan (Assistant Professor)  
 Mr. Muzamal Arif (Lecturer)  
 Miss Irum Ashraf (Lecturer)  
 Mr. Muhammad Sohaib (Lab Engineer)  
 Mr. Ukasha Omer (Lab Engineer)  
 Miss Ayesha Amajd (Lab Engineer)  
 Shared Faculty from other Departments  
 Mr. Murtaza Ali Usama (Department Coordinator)

### Program Summary

Admission            Fall & Spring  
 Duration             2 Years  
 Total Semesters:    4  
 Total Credit hours: 72

### Career Prospects

- IT project managers
- Software Engineers
- Computer Programmers
- Applications Developers
- Web Designers & Developers
- Database Administrators & Data analysts
- Computer Network Architectures & Network Administrators
- Information Security Analysts
- Cybersecurity Specialists
- Video game developer
- Artificial Intelligence Experts
- Computer and Information Research Scientists
- Cloud computing experts
- Computer forensics experts and applications developers
- Computer Science Teacher
- IT consultants
- Network Engineers

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
CS4 -501	Programming Fundamentals	4 (3-3)
ICT -501	Application of Information & Communication Technologies	3 (2-3)
QRE -501	QR 1 (Discrete Structures)	3 (3-0)
QRE -502	QR 2 (Calculus and Analytic Geometry)	3 (3-0)
ENG -501	Functional English	3 (3-0)
CS4 -501	Programming Fundamentals	3 (3-3)

### Semester 2

Course Code	Course Title	Credit Hour
CS4 -502	Object Oriented Programming	4 (3-3)
CS4 -503	Database Systems	4 (3-3)
CS4 -504	Digital Logic Design	3 (2-3)
CS2 -501	Linear Algebra	3 (3-0)
ENG -502	Expository Writing	3 (3-0)

### Semester 3

Course Code	Course Title	Credit Hour
CS4 -505	Data Structures	4 (3-3)
CS4 -506	Information Security	3 (2-3)
CS4 -507	Artificial Intelligence	3 (2-3)
CS4 -508	Computer Networks	3 (2-3)
CS4 -509	Software Engineering	3 (3-0)
CS4 -510	Computer Organization & Assembly Language	3 (2-3)

### Semester 4

Course Code	Course Title	Credit Hour
CS6-532	System & Network Administration	3 (1-6)
CS6-601	Web Technologies	3 (1-6)
CS6-617	Advanced Data Management	3 (1-6)
CS5-603	HCI & Computer Graphics	3 (1-6)
CS6-606	Cyber Security	2 (0-6)
ISL-501	Islamic Studies	2 (2-0)
ICP- 601	Ideology and Constitution of Pakistan	2 (2-0)
ENT-601	Entrepreneurship	2 (2-0)
THQ-501	Teaching of Holy Quran	0 (2-0)
<b>Total Credit hours</b>		<b>72</b>

## ADP Cyber Security (CyS)

**Teaching Faculty**  
 Dr. Sohaib Latif (Associate Professor)  
 Dr. Sajid Khan (Assistant Professor)  
 Miss Sidra Shahzadi (Lecturer)  
 Miss Maleeha Zainab (Lecturer)  
 Mr. Muhammad Sohaib (Lab Engineer)  
 Mr. Ukasha Omer (Lab Engineer)  
 Miss Ayesha Amajd (Lab Engineer)  
 Shared Faculty from other Departments  
 Mr. Murtaza Ali Usama (Department Coordinator)

### Program Summary

Admission            Fall & Spring  
 Duration             2 Years  
 Total Semesters:    4  
 Total Credit hours: 72

### Career Prospects

- Information Security Analysts
- Cybersecurity Specialists
- Video game developer
- Artificial Intelligence Experts
- Computer and Information Research Scientists

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
CS4-501	Programming Fundamentals	4 (3-3)
ICT-501	Application of Information & Communication Technologies	3 (2-3)
QRE-501	QR 1 (Discrete Structures)	3 (3-0)
QRE-502	QR 2 (Calculus and Analytic Geometry)	3 (3-0)
ENG-501	Functional English	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
CS4-502	Object Oriented Programming	4 (3-3)
CS4-503	Database Systems	4 (3-3)
CS4-504	Digital Logic Design	3 (2-3)
CS2-501	Linear Algebra	3 (3-0)
ENG-502	Expository Writing	3 (3-0)

### Semester 3

Course Code	Course Title	Credit Hour
CS4-505	Data Structures	4 (3-3)
CS4-506	Information Security	3 (2-3)
CS4-507	Artificial Intelligence	3 (2-3)
CS4-508	Computer Networks	3 (2-3)
CS4-509	Software Engineering	3 (3-0)
CS4-510	Computer Organization & Assembly Language	3 (2-3)

### Semester 4

Course Code	Course Title	Credit Hour
CS6-606	Cyber Security	3 (1-6)
CS6-527	Wireless and Mobile Security	2 (0-6)
CS6-528	Network Security	3 (1-6)
CS6-529	Secure Software Design and Development	3 (1-6)
CS6-530	Digital Forensics	3 (1-6)
ISL-501	Islamic Studies	2 (2-0)
ICP-601	Ideology and Constitution of Pakistan	2 (2-0)
ENT-601	Entrepreneurship	2 (2-0)
THQ-501	Teaching of Holy Quran	0 (2-0)
<b>Total Credit Hours</b>		<b>72</b>

## ADP Data Science (DS)

**Teaching Faculty**  
 Dr. Sohaib Latif (Associate Professor)  
 Dr. Sajid Khan (Assistant Professor)  
 Miss Mashal Wasique (Lecturer)  
 Miss Tayyaba Khalid (Lecturer)  
 Mr. Muhammad Sohaib (Lab Engineer)  
 Mr. Ukasha Omer (Lab Engineer)  
 Miss Ayesha Amajd (Lab Engineer)  
 Shared Faculty from other Departments  
 Mr. Murtaza Ali Usama (Department Coordinator)

### Program Summary

Admission            Fall & Spring  
 Duration             2 Years  
 Total Semesters:    4  
 Total Credit hours:  72

### Career Prospects

- IT project managers
- Computer Programmers
- Applications Developers
- Web Designers & Developers
- Database Administrators & Data analysts
- Video game developer
- Artificial Intelligence Experts
- Computer and Information Research Scientists
- Cloud computing experts
- Network Engineers

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
CS4-501	Programming Fundamentals	3-1 (3-3)
ICT-501	Application of Information & Communication Technologies	2-1 (2-3)
QRE-501	QR 1 (Discrete Structures)	3-0 (3-0)
QRE-502	QR 2 (Calculus and Analytic Geometry)	3-0 (3-0)
ENG-501	Functional English	3-0 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
CS4-502	Object Oriented Programming	3-1 (3-3)
CS4-503	Database Systems	3-1 (3-3)
CS4-504	Digital Logic Design	2-1 (2-3)
CS2-501	Linear Algebra	3-0 (3-0)
ENG-502	Expository Writing	3-0 (3-0)
CS4-502	Object Oriented Programming	3-1 (3-3)

### Semester 3

Course Code	Course Title	Credit Hour
CS4-505	Data Structures	3-1 (3-3)
CS4-506	Information Security	2-1 (2-3)
CS4-507	Artificial Intelligence	2-1 (2-3)
CS4-508	Computer Networks	2-1 (2-3)
CS4-509	Software Engineering	3 (3-0)
CS4-510	Computer Organization & Assembly Language	2-1 (2-3)

### Semester 4

Course Code	Course Title	Credit Hour
CS6-619	Introduction to Data Science	2 (0-6)
CS6-522	Machine Learning	3 (1-6)
CS5-513	Data Mining	3 (1-6)
CS6-531	Data Visualization	3 (1-6)
CS6-523	ANN & Deep Learning	3 (1-6)
ISL-501	Islamic Studies	2 (2-0)
ICP - 601	Ideology and Constitution of Pakistan	2 (2-0)
ENT-601	Entrepreneurship	2 (2-0)
THQ-501	Teaching of Holy Quran	0 (2-0)
<b>Total</b>		<b>72</b>



## ADP Database Management Science

### Teaching Faculty

Dr. Sohaib Latif (Associate Professor)  
 Dr. Sajid Khan (Assistant Professor)  
 Miss Sidra Shahzadi (Lecturer)  
 Miss Mashal Wasique (Lecturer)  
 Mr. Muhammad Sohaib (Lab Engineer)  
 Mr. Ukasha Omer (Lab Engineer)  
 Miss Ayesha Amajd (Lab Engineer)  
 Shared Faculty from other Departments  
 Mr. Murtaza Ali Usama (Department Coordinator)

### Program Summary

Admission: Fall & Spring  
 Duration: 2 Years  
 Total Semesters: 4  
 Total Credit hours: 72

### Career Prospects

- Computer Programmers
- Applications Developers
- Database Administrators & Data analysts
- Computer Network Architectures & Network Administrators
- Computer and Information Research Scientists
- Cloud computing experts
- IT consultants
- Network Engineers

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
CS4-501	Programming Fundamentals	4 (3-3)
ICT-501	Application of Information & Communication Technologies	3 (2-3)
QRE-501	QR 1 (Discrete Structures)	3 (3-0)
QRE-502	QR 2 (Calculus and Analytic Geometry)	3 (3-0)
ENG-501	Functional English	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
CS4-502	Object Oriented Programming	4 (3-3)
CS4-503	Database Systems	4 (3-3)
CS4-504	Digital Logic Design	3 (2-3)
CS2-501	Linear Algebra	3 (3-0)
ENG-502	Expository Writing	3 (3-0)

### Semester 3

Course Code	Course Title	Credit Hour
CS4-505	Data Structures	4 (3-3)
CS4-506	Information Security	3 (2-3)
CS4-507	Artificial Intelligence	3 (2-3)
CS4-508	Computer Networks	3 (2-3)
CS4-509	Software Engineering	3 (3-0)
CS4-510	Computer Organization & Assembly Language	3 (2-3)

### Semester 4

Course Code	Course Title	Credit Hour
CS6-547	Fundamentals of Front -End Development	2 (0-6)
CS6-548	Database Programming using Oracle 11g	3 (1-6)
CS6-549	Web Based Database Applications	3 (1-6)
CS6-550	Operating Systems	3 (1-6)
CS6-551	Introduction to Database Administration	3 (1-6)
ISL-501	Islamic Studies	2 (2-0)
ICP - -601	Ideology and Constitution of Pakistan	2 (2-0)
ENT-601	Entrepreneurship	2 (2-0)
THQ-501	Teaching of Holy Quran	0 (2-0)
<b>Total Credit Hours</b>		<b>72</b>

## ADP Artificial Intelligence

### Teaching Faculty

Dr. Sohaib Latif (Associate Professor)  
 Dr. Sajid Khan (Assistant Professor)  
 Miss Irum Ashraf (Lecturer)  
 Miss Maleeha Zainab (Lecturer)  
 Mr. Muhammad Sohaib (Lab Engineer)  
 Mr. Ukasha Omer (Lab Engineer)  
 Miss Ayesha Amajd (Lab Engineer)  
 Shared Faculty from other Departments  
 Mr. Murtaza Ali Usama (Department Coordinator)

### Program Summary

Admission: Fall & Spring  
 Duration: 2 Years  
 Total Semesters: 4  
 Total Credit hours: 72

### Career Prospects

- Artificial Intelligence Experts
- Computer and Information Research Scientists
- Cloud computing experts
- Computer forensics experts and applications developers

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
CS4-501	Programming Fundamentals	4 (3-3)
ICT-501	Application of Information & Communication Technologies	3 (2-3)
QRE-501	QR 1 (Discrete Structures)	3 (3-0)
QRE-502	QR 2 (Calculus and Analytic Geometry)	3 (3-0)
ENG-501	Functional English	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
CS4502	Object Oriented Programming	4 (3-3)
CS4503	Database Systems	4 (3-3)
CS4504	Digital Logic Design	3 (2-3)
CS2501	Linear Algebra	3 (3-0)
ENG502	Expository Writing	3 (3-0)

### Semester 3

Course Code	Course Title	Credit Hour
CS4-505	Data Structures	4 (3-3)
CS4-506	Information Security	3 (2-3)
CS4-507	Artificial Intelligence	3 (2-3)
CS4-508	Computer Networks	3 (2-3)
CS4-509	Software Engineering	3 (3-0)
CS4-510	Computer Organization & Assembly Language	3 (2-3)

### Semester 4

Course Code	Course Title	Credit Hour
CS5-513	Data Mining	3 (1-6)
CS6-522	Machine Learning	3 (1-6)
CS6-523	ANN & DL	3 (1-6)
CS5-606	Parallel and Distributed Computing	3 (1-6)
CS6-525	Programming for AI	2 (0-6)
ISL-501	Islamic Studies	2 (2-0)
ICP--501	Ideology and Constitution of Pakistan	2 (2-0)
ENT-501	Entrepreneurship	2 (2-0)
THQ-501	Teaching of Holy Quran	0 (2-0)
<b>Total Credit Hours</b>		<b>72</b>

## ADP Computer Science

### Teaching Faculty

Dr. Sohaib Latif (Associate Professor)  
 Dr. Sajid Khan (Assistant Professor)  
 Mr. Rai Samee Ullah (Lecturer)  
 Mr. Muzamal Arif (Lecturer)  
 Mr. Muhammad Sohaib (Lab Engineer)  
 Mr. Ukasha Omer (Lab Engineer)  
 Miss Ayesha Amajd (Lab Engineer)  
 Shared Faculty from other Departments  
 Mr. Murtaza Ali Usama (Department Coordinator)

### Program Summary

Admission            Fall & Spring  
 Duration             2 Years  
 Total Semesters:    4  
 Total Credit hours: 72

### Career Prospects

- IT project managers
- Computer Programmers
- Applications Developers
- Web Designers & Developers
- Database Administrators & Data analysts
- Computer Network Architectures & Network Administrators
- Information Security Analysts
- Computer forensics experts and applications developers
- Computer Science Teacher
- IT consultants
- Network Engineers

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
CS4-501	Programming Fundamentals	3-1 (3-3)
ICT-501	Application of Information & Communication Technologies	2-1 (2-3)
QRE-501	QR 1 (Discrete Structures)	3-0 (3-0)
QRE-502	QR 2 (Calculus and Analytic Geometry)	3-0 (3-0)
ENG-501	Functional English	3-0 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
CS4-502	Object Oriented Programming	3-1 (3-3)
CS4-503	Database Systems	3-1 (3-3)
CS4-504	Digital Logic Design	2-1 (2-3)
CS2-501	Linear Algebra	3-0 (3-0)
ENG-502	Expository Writing	3-0 (3-0)

### Semester 3

Course Code	Course Title	Credit Hour
CS4-505	Data Structures	3-1 (3-3)
CS4-506	Information Security	2-1 (2-3)
CS4-507	Artificial Intelligence	2-1 (2-3)
CS4-508	Computer Networks	2-1 (2-3)
CS4-509	Software Engineering	3 (3-0)
CS4-510	Computer Organization & Assembly Language	2-1 (2-3)

### Semester 4

Course Code	Course Title	Credit Hour
CS5-502	Elective 1 (Advanced Database Lab)	1-2 (1-6)
CS6-601	Elective 2 (Web Technologies Lab)	1-2 (1-6)
CS6-602	Elective 3 Mobile Application Development Lab)	1-2 (1-6)
CS6-603	Elective 4 Advanced Programming Lab)	1-2 (1-6)
CS6-606	Elective 5 Cyber Security Lab)	0-2 (0-6)
ISL-501	Islamic Studies	2-0 (2-0)
ICP- 601	Ideology and Constitution of Pakistan	2-0 (2-0)
ENT-601	Entrepreneurship	2-0 (2-0)
THQ-501	Teaching of Holy Quran	0 (2-0)
<b>Total Credit Hours</b>		<b>72</b>

## ADP Software Development

### Teaching Faculty

Dr. Sohaib Latif (Associate Professor)  
 Dr. Sajid Khan (Assistant Professor)  
 Mr. Rai Samee Ullah (Lecturer)  
 Mr. Muzamal Arif (Lecturer)  
 Miss Mashal Wasique (Lecturer)  
 Mr. Muhammad Sohaib (Lab Engineer)  
 Mr. Ukasha Omer (Lab Engineer)  
 Miss Ayesha Amajd (Lab Engineer)  
 Shared Faculty from other Departments  
 Mr. Murtaza Ali Usama (Department Coordinator)

### Career Prospects

- Software Engineers
- Computer Programmers
- Database Administrators & Data analysts
- Computer Network Architectures & Network Administrators
- Information Security Analysts
- Computer forensics experts and applications developers
- Computer Science Teacher
- IT consultants
- Network Engineers

### Program Summary

Admission                      Fall & Spring  
 Duration                        2 Years  
 Total Semesters:            4  
 Total Credit hours:        72

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
CS4-501	Programming Fundamentals	3-1 (3-3)
ICT-501	Application of Information & Communication Technologies	2-1 (2-3)
QRE-501	QR 1 (Discrete Structures)	3-0 (3-0)
QRE-502	QR 2 (Calculus and Analytic Geometry)	3-0 (3-0)
ENG-501	Functional English	3-0 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
CS4-502	Object Oriented Programming	3-1 (3-3)
CS4-503	Database Systems	3-1 (3-3)
CS4-504	Digital Logic Design	2-1 (2-3)
CS2-501	Linear Algebra	3-0 (3-0)
ENG-502	Expository Writing	3-0 (3-0)

### Semester 3

Course Code	Course Title	Credit Hour
CS4-505	Data Structures	3-1 (3-3)
CS4-506	Information Security	2-1 (2-3)
CS4-507	Artificial Intelligence	2-1 (2-3)
CS4-508	Computer Networks	2-1 (2-3)
CS4-509	Software Engineering	3 (3-0)
CS4-510	Computer Organization & Assembly Language	2-1 (2-3)

### Semester 4

Course Code	Course Title	Credit Hour
CS6-544	Advance Web Development	1-2 (1-6)
CS4-506	Elective Information Security	1-2 (1-6)
CS6-543	Formal Methods in Software Engineering	1-2 (1-6)
CS6-545	Stochastic Processes	1-2 (1-6)
CS6-546	Software Project	0-2 (0-6)
ISL-501	Islamic Studies	2-0 (2-0)
ICP-601	Ideology and Constitution of Pakistan	2-0 (2-0)
ENT-601	Entrepreneurship	2-0 (2-0)
THQ-501	Teaching of Holy Quran	0 (2-0)
<b>Total Credit Hours</b>		<b>72</b>

## ADP Web Design & Development

### Teaching Faculty

Dr. Sohaib Latif (Associate Professor)  
 Dr. Sajid Khan (Assistant Professor)  
 Miss Mashal Wasique (Lecturer)  
 Miss Tayyaba Khalid (Lecturer)  
 Mr. Muhammad Sohaib (Lab Engineer)  
 Mr. Ukasha Omer (Lab Engineer)  
 Miss Ayesha Amajd (Lab Engineer)  
 Shared Faculty from other Departments  
 Mr. Murtaza Ali Usama (Department Coordinator)

### Career Prospects

- Applications Developers
- Web Designers & Developers
- Database Administrators & Data analysts
- Computer Network Architectures & Network Administrators

### Program Summary

Admission: Fall & Spring  
 Duration: 2 Years  
 Total Semesters: 4  
 Total Credit hours: 72

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
CS4-501	Programming Fundamentals	3-1 (3-3)
ICT-501	Application of Information & Communication Technologies	2-1 (2-3)
QRE-501	QR 1 (Discrete Structures)	3-0 (3-0)
QRE-502	QR 2 (Calculus and Analytic Geometry)	3-0 (3-0)
ENG-501	Functional English	3-0 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
CS4-502	Object Oriented Programming	3-1 (3-3)
CS4-503	Database Systems	3-1 (3-3)
CS4-504	Digital Logic Design	2-1 (2-3)
CS2-501	Linear Algebra	3-0 (3-0)
ENG-502	Expository Writing	3-0 (3-0)

### Semester 3

Course Code	Course Title	Credit Hour
CS4-505	Data Structures	3-1 (3-3)
CS4-506	Information Security	2-1 (2-3)
CS4-507	Artificial Intelligence	2-1 (2-3)
CS4-508	Computer Networks	2-1 (2-3)
CS4-509	Software Engineering	3 (3-0)
CS4-510	Computer Organization & Assembly Language	2-1 (2-3)

### Semester 4

Course Code	Course Title	Credit Hour
CS6-541	Cyber Law	1-2 (1-6)
CS6-534	Web Design & Development	1-2 (1-6)
CS6-535	Data Communication	1-2 (1-6)
CS6-537	Information system	1-2 (1-6)
CS6-538	Operating System/Single Page Application	0-2 (0-6)
ISL-501	Islamic Studies	2-0 (2-0)
ICP - 601	Ideology and Constitution of Pakistan	2-0 (2-0)
ENT-601	Entrepreneurship	2-0 (2-0)
THQ-501	Teaching of Holy Quran	0 (2-0)
<b>Total Credit Hours</b>		<b>72</b>

# BS Computer Science

**Teaching Faculty**  
 Dr. Tanvir Ahmed (Professor)  
 Dr. Sohaib Latif (Associate Professor)  
 Dr. Sajid Khan (Assistant Professor)  
 Mr. Rai Samee Ullah (Lecturer)  
 Mr. Muzamal Arif (Lecturer)  
 Miss Irum Ashraf (Lecturer)  
 Miss Sidra Shahzadi (Lecturer)  
 Miss Mashal Wasique (Lecturer)  
 Miss Maleeha Zainab (Lecturer)  
 Miss Tayyaba Khalid (Lecturer)  
 Mr. Muhammad Sohaib (Lab Engineer)  
 Mr. Ukasha Omer (Lab Engineer)  
 Miss Ayesha Amajd (Lab Engineer)  
 Shared Faculty from other Departments  
 Mr. Murtaza Ali Usama (Department Coordinator)

**Program Summary**  
 Admission: Fall & Spring  
 Duration: 4 Years  
 Total Semesters: 8  
 Total Credit hours: 130

**Career Prospects**

- IT project managers
- Software Engineers
- Computer Programmers
- Applications Developers
- Database Administrators & Data analysts
- Computer Network Architectures & Network Administrators
- Artificial Intelligence Experts
- Computer and Information Research Scientists
- Cloud computing experts
- Computer forensics experts and applications developers
- Computer Science Teacher
- IT consultants
- Network Engineers

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
CS4-501	Programming Fundamentals	4 (3-3)
ICT-501	Application of Information & Communication Technologies	3 (2-3)
QRE-501	QR 1 (Discrete Structures)	3 (3-0)
QRE-502	QR 2 (Calculus and Analytic Geometry)	3 (3-0)
ENG-501	Functional English	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
CS4-502	Object Oriented Programming	4 (3-3)
CS4-503	Database Systems	4 (3-3)
CS4-504	Digital Logic Design	3 (2-3)
CS2-501	Multivariable Calculus	3 (3-0)
CS2-502	Linear Algebra	3 (3-0)

### Semester 3

Course Code	Course Title	Credit Hour
CS4-505	Data Structures	4 (3-3)
CS4-506	Information Security	3 (2-3)
CS4-507	Artificial Intelligence	3 (2-3)
CS4-508	Computer Networks	3 (2-3)
CS4-509	Software Engineering	3 (3-0)
CS2-503	Probability & Statistics	3 (3-0)

### Semester 4

Course Code	Course Title	Credit Hour
CS4-510	Computer Organization & Assembly Language	3 (2-3)
CS5-501	Domain Core 1 (Theory of Automata)	3 (3-0)
CS5-502	Domain Core 2 (Advance Database Management Systems)	3 (2-3)
PHY-510	Natural Science (Applied Physics)	3 (2-3)
ENG-502	Expository Writing	3 (3-0)
ISL-501	Islamic Studies	2 (2-0)
THQ-501	Teaching of Holy Quran	0 (2-0)

### Semester 5

Course Code	Course Title	Credit Hour
CS4-611	Operating Systems	3 (2-3)
CS5-603	Domain Core 3 (HCI & Computer Graphics)	3 (2-3)
CS5-604	Domain Core 4 (Computer Architecture)	3 (2-3)
CS6-601	Domain Elective 1 (Example: Web Technologies)	3 (2-3)
CS6-602	Domain Elective 2 (Example: Mobile Application Development 1)	3 (2-3)
Mgm-601	Social Science (Example: Introduction to Management)	2 (2-0)

### Semester 6

Course Code	Course Title	Credit Hour
CS5-605	Domain Core 5 (Compiler Construction)	3 (2-3)
CS5-606	Domain Core 6 (Parallel & Distributed Computing)	3 (2-3)
CS6-603	Domain Elective 3 (Example: Advanced Programming- Visual Prog)	3 (2-3)
CS6-604	Domain Elective 4 (Example: Numerical Analysis)	3 (2-3)
CS6-605	Domain Elective 5 (Example: Web Engineering)	3 (2-3)
CS6-606	Domain Elective 6 (Example: Cyber Security)	3 (2-3)



## Semester 7

Course Code	Course Title	Credit Hour
CS4-613	Final Year Project – I	2 (0-6)
CS4-612	Analysis of Algorithms	3 (3-0)
CS6-607	Domain Elective 7 (Example: Software Testing & Quality Assurance)	3 (2-3)
CS3-601	Elective Supporting Course (Example: Introduction to Marketing)	3 (3-0)
ENG-603	Technical & Business Writing	3 (3-0)
ENT-601	Entrepreneurship	2 (2-0)

## Semester 8

Course Code	Course Title	Credit Hour
CS4-614	Final Year Project – II	4 (2-2)
ICP-601	Ideology and Constitution of Pakistan	2 (2-0)
ICP-602	Arts & Humanities (Professional Practices)	2 (2-0)
CCE-601	Civics and Community Engagement	2 (2-0)
<b>Total Credit Hours</b>		<b>130</b>

## BS Software Engineering

### Teaching Faculty

Dr. Tanvir Ahmed (Professor)  
 Dr. Sohaib Latif (Associate Professor)  
 Dr. Sajid Khan (Assistant Professor)  
 Mr. Rai Samee Ullah (Lecturer)  
 Mr. Muzamal Arif (Lecturer)  
 Miss Irum Ashraf (Lecturer)  
 Miss Sidra Shahzadi (Lecturer)  
 Miss Mashal Wasique (Lecturer)  
 Miss Maleeha Zainab (Lecturer)  
 Miss Tayyaba Khalid (Lecturer)  
 Mr. Muhammad Sohaib (Lab Engineer)  
 Mr. Ukasha Omer (Lab Engineer)  
 Miss Ayesha Amajd (Lab Engineer)  
 Shared Faculty from other Departments  
 Mr. Murtaza Ali Usama (Department Coordinator)

### Program Summary

Admission: Fall  
 Duration: 4 Years  
 Total Semesters: 8  
 Total Credit hours: 130

### Career Prospects

- Software Engineers
- Database Administrators & Data analysts
- Computer Network Architectures & Network Administrators
- Information Security Analysts
- Artificial Intelligence Experts
- Computer and Information Research Scientists
- Cloud computing experts
- Computer forensics experts and applications developers
- Computer Science Teacher
- IT consultants

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
CS4-501	Programming Fundamentals	4 (3-3)
ICT-501	Application of Information & Communication Technologies	3 (2-3)
QRE-501	QR 1 (Discrete Structures)	3 (3-0)
QRE-502	QR 2 (Calculus and Analytic Geometry)	3 (3-0)
ENG-501	Functional English	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
CS4-502	Object Oriented Programming	4 (3-3)
CS4-503	Database Systems	4 (3-3)
CS4-504	Digital Logic Design	3 (2-3)
CS2-501	Multivariable Calculus	3 (3-0)
CS2-502	Linear Algebra	3 (3-0)

### Semester 3

Course Code	Course Title	Credit Hour
CS4-505	Data Structures	4 (3-3)
CS4-506	Information Security	3 (2-3)
CS4-507	Artificial Intelligence	3 (2-3)
CS4-508	Computer Networks	3 (2-3)
CS4-509	Software Engineering	3 (3-0)
CS2-503	Probability & Statistics	3 (3-0)

### Semester 4

Course Code	Course Title	Credit Hour
CS4-510	Computer Organization & Assembly Language	3 (2-3)
CS5-507	Domain Core 1 (Software Design & Architecture)	
CS5-508	Domain Core 2 (Software Construction & Development)	
PHY-510	Natural Science (Applied Physics)	3 (2-3)
ENG-502	Expository Writing	3 (3-0)
ISL-501	Islamic Studies	2 (2-0)
THQ-501	Teaching Holy Quran	0(2-0)

## Semester 5

Course Code	Course Title	Credit Hour
CS4-611	Operating Systems	3 (2-3)
CS5-610	Domain Core 3 (Software Quality Engineering)	
CS5-611	Domain Core 4 (Software Requirement Engineering)	
CS6-601	Domain Elective 1 (Example: Web Technologies)	3 (2-3)
CS6-602	Domain Elective 2 (Example: Mobile Application Development 1)	3 (2-3)
MGM-601	Social Science (Example: Introduction to Management)	2 (2-0)

## Semester 6

Course Code	Course Title	Credit Hour
CS5-609	Domain Core 5 (Software Project Management)	3(3-0)
CS5-606	Domain Core 6 (Parallel & Distributed Computing)	3 (2-3)
CS6-611	Software Verification and Validation	3(3-0)
CS6-612	Object Oriented Analysis & Design	3(3-0)
CS6-605	Domain Elective 5 (Example: Web Engineering)	3 (2-3)
CS6-606	Domain Elective 6 (Example: Cyber Security)	3 (2-3)

## Semester 7

Course Code	Course Title	Credit Hour
CS4-613	Final Year Project- I	2 (0-6)
CS3 -601	Elective Supporting Course (Example: Introduction to Marketing)	3 (3-0)
CS - 612	Analysis of Algorithms	3 (3-0)
CS6-620	Software Re-Engineering	3 (3-0)
ENG -603	Technical & Business Writing	3 (3-0)
ENT-601	Entrepreneurship	2 (2-0)

## Semester 8

Course Code	Course Title	Credit Hour
CS4-614	Final Year Project- II	4 (0-12)
ICP-601	Ideology and Constitution of Pakistan	2 (2-0)
ICP-602	Arts & Humanities (Professional Practices)	2 (2-0)
CCE-601	Civics and Community Engagement	2 (2-0)
<b>Total Credit Hours</b>		<b>130</b>

## MS Computer Science (CS)

**Teaching Faculty**  
 Dr. Tanvir Ahmed (Professors)  
 Dr. Khalid Masood (Professors)  
 Dr. Sohaib Latif (Associate Professor)  
 Dr. Sajid Khan (Assistant Professor)  
 Dr. Zeeshan Ashraf (Visiting Faculty)  
 Mr. Rai Samee Ullah (Lecturer)  
 Miss Irum Ashraf (Lecturer)  
 Shared Faculty from Mathematics Department  
 Mr. Murtaza Ali Usama (Department Coordinator)

**Program Summary**  
 Admission: Fall & Spring  
 Duration: 2 Years  
 Total Semesters: 04  
 Total Credit hours: 31

### Career Prospects

- IT project managers
- Computer Programmers
- Applications Developers
- Database Administrators & Data analysts
- Computer Network Architectures & Network Administrators
- Information Security Analysts
- Computer and Information Research Scientists
- Cloud computing experts
- Computer forensics experts and applications developers
- Computer Science Teacher
- IT consultants
- Network Engineers

## SCHEME OF STUDIES

### Core courses:

Course Code	Course Title	Credit Hour
CS1-701	Theory of Automata	3(3-0)
CS1-702	Advanced Analysis of Algorithms	3(3-0)
CS1-703	Advanced Operating Systems	3(3-0)
CS1-704	Advanced Research Methodology	1(1-0)
CS1-705	Advanced Computer Architecture	3(3-0)
CS1-706	Theory of Programming languages	3(3-0)

## COURSES OF STUDY

(Information about the Prerequisites (if any) of the course(s) will be provided by the Department at the beginning of the program)

### Semester 1

Course Code	Course Title	Credit Hour
CS1-701	Theory of Automata	3(3-0)
CS1-702	Advanced Analysis of Algorithms	3(3-0)
CS1-703	Advanced Operating Systems	3(3-0)

### Semester 2

Course Code	Course Title	Credit Hour
CS1-704	Advanced Research Methodology	1(1-0)
CS1-705	Advanced Computer Architecture	3(3-0)
CS2-701	Elective I	3(3-0)
CS2-702	Elective II	3(3-0)

### Semester 3

Course Code	Course Title	Credit Hour
CS2-703	Elective III	3(3-0)
CS2-705	Thesis-I / Elective Course	3(3-0)

### Semester 4

Course Code	Course Title	Credit Hour
CS2-705	ThesisI / Elective Course	3(3-0)
CS2-704	Elective IV	3(3-0)
<b>Total Credit Hours</b>		<b>31</b>

## Elective Courses

Course Code	Course Title	Credit Hour
CS2-701	Computer Graphics	3(3-0)
CS2-702	Digital Image Processing	3(3-0)
CS2-703	Digital Signal Processing	3(3-0)
CS2-704	Advanced Computer Vision	3(3-0)
CS2-705	Distributed Computing	3(3-0)
CS2-706	Data and Network Security	3(3-0)
CS2-707	Fuzzy Logic	3(3-0)
CS2-708	Artificial Neural Network	3(3-0)
CS2-709	Expert Systems	3(3-0)
CS2-710	Data Warehousing	3(3-0)
CS2-711	Web Design and Development	3(3-0)
CS2-712	Mobile Application and Development	3(3-0)
CS2-713	Social Computing	3(3-0)
CS2-714	Wireless Networks	3(3-0)
CS2-715	Web Engineering	3(3-0)
CS2-716	Fundamentals of Data Mining	3(3-0)
CS2-717	Computational Intelligence	3(3-0)
CS2-718	Multi Agent Systems	3(3-0)
CS2-719	Natural Language Processing	3(3-0)
CS2-720	Game Development	3(3-0)
CS2-721	Logical Paradigms of Computing	3(3-0)
CS2-722	Formal Methods for Software Engineering	3(3-0)
CS2-723	Data Analytics	3(3-0)
DS1-701	Statistical and Mathematical Methods For Data Science	3(3-0)
DS1-702	Tools and Techniques in Data Science	3(3-0)
DS1-703	Machine Learning	3(3-0)
DS2-701	Big Data Analytics	3(3-0)
DS2-702	Deep Learning	3(3-0)
DS2-703	Natural Language Processing	3(3-0)
DS2-704	Distributed Data Processing	3(3-0)

## MS Data Science (DS)

**Teaching Faculty**  
 Dr. Tanvir Ahmed (Professors)  
 Dr. Khalid Masood (Professors)  
 Dr. Sohaib Latif (Associate Professor)  
 Dr. Sajid Khan (Assistant Professor)  
 Dr. Zeeshan Ashraf (Visiting Faculty)  
 Mr. Muzamal Arif (Lecturer)  
 Miss Sidra Shahzadi (Lecturer)  
 Shared Faculty from Mathematics Department  
 Mr. Murtaza Ali Usama (Department Coordinator)

### Program Summary

Admission            Fall & Spring  
 Duration             2 Years  
 Total Semesters:    04  
 Total Credit hours:  31

### Career Prospects

- Computer Programmers
- Applications Developers
- Database Administrators & Data analysts
- Computer Network Architectures & Network Administrators
- Information Security Analysts
- Cloud computing experts
- Computer forensics experts and applications developers
- Computer Science Teachers

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
DS1-701	Statistical and Mathematical Methods for Data Science	3(3-0)
DS1-702	Tools and Techniques in Data Science	3(2-1)
DS3-701	Elective I	3(3-0)

### Semester 2

Course Code	Course Title	Credit Hour
DS1-703	Machine Learning	3(3-0)
DS2-701	Specialization -Elective I	3(3-0)
DS2-702	Specialization -Elective II	3(3-0)
CS1-704	Advanced Research Methodology	1(1-0)

### Semester 3

Course Code	Course Title	Credit Hour
DS3-702	Elective II	3(3-0)
DS1-705	MS Thesis I	3(3-0)

### Semester 4

Course Code	Course Title	Credit Hour
DS3703	Elective II	6(6-0)
DS1705	MS Thesis II	3(3-0)
<b>Total Credit Hours</b>		<b>31</b>

## Elected Courses

Course Code	Course Title	Credit Hour
DS3-702	Bayesian Data Analysis	3(3-0)
DS3-703	Optimization Methods for Data Science and Machine Learning	3(3-0)
CS2-704	Advanced Computer Vision	3(3-0)
CS1-706	Theory of Programming Languages	3(3-0)
CS1-703	Advanced Operating Systems	3(3-0)
CS1-705	Advanced Computer Architecture	3(3-0)
CS1-701	Theory of Automata	3(3-0)
DS3-704	Data Visualization	3(3-0)
CS1-702	Advanced Analysis of Algorithms	3(3-0)
DS3-705	Time series Analysis and Prediction	3(3-0)
DS3-706	Social network analysis	3(3-0)
DS3-707	Scientific Computing in Finance	3(3-0)
DS3-708	Computational Genomics	3(3-0)
DS3-709	Cloud computing	3(3-0)
DS3-710	Bioinformatics	3(3-0)
DS3-711	Probabilistic Graphical Models	3(3-0)
DS3-712	High performance computing	3(3-0)
DS3-713	Inference & Representation	3(3-0)
DS3-714	Deep Reinforcement Learning	3(3-0)
DS3-715	Distributed Machine Learning in Apache Spark	3(3-0)
DS3-716	Distributed Data Processing and Machine Learning	3(3-0)

## FACULTY OF SCIENCES

### Department of Management Sciences and Economics

#### Introduction

The department is dedicated to evolve an encouraging environment to cultivate and stimulate students and faculty. This department is using exceedingly groundbreaking teaching approaches which conglomerate brilliance in research with state of the art campus building with facilities and a full gamut of Undergraduate, MS/MPhil programs. These programs deliver visions into business practices and train students with analytical skills which have confirmed to be perilous to the success of organizations and companies.

The department of Management Sciences and Economics is exerting painstaking efforts to build marked reputation for producing business graduates fully equipped with professional excellence and excelled moral values.

The department is dedicated to cultivate a cathartic educational atmosphere that empowers students with forward-looking knowledge and ground-breaking thinking. We are committed to nurturing integrity and ethical leadership by leveraging specialized resources and aligning our curriculum with the Sustainable Development Goals (SDGs). Through collaborative learning, real-world applications, and a focus on social responsibility, we prepare our graduates to excel in a dynamic business landscape and contribute positively to society.

#### Objectives

- enhance the essential leadership skills and abilities of students.
- develop competencies of the students to broaden their vision.
- develop and enhance the business management and accounting skills and capacities of the students.
- enhance the ability of the students and groom them to deal with the multifaceted accounting circumstances.
- urge and enhance the entrepreneurial skills to become self-employed and start their own business ventures.

### Programs Being Offered

ADP Business Studies  
ADP Accounting & Finance  
ADP Commerce  
ADP Supply Chain Management

ADP International Sales & Marketing  
ADP Hotel & Tourism Management  
BBA Bachelors of Business Administration  
BS Accounting & Finance

## Message From HOD



The Department of Management Sciences and Economics at Grand Asian University, Sialkot, is committed to fostering an environment that inspires and nurtures both students and faculty. With a focus on cultivating excellence, our department aims to shape individuals who are ready to lead and innovate in the world of business and economics.

From undergraduate to MS-level programs, the department provides a comprehensive academic experience that delves into the intricacies of business practices and economic theories. Students are trained to develop critical analytical and problem-solving skills that are indispensable for the success of organizations and companies. Our graduates emerge as capable professionals who can adapt to the challenges of a rapidly evolving business landscape, making impactful contributions both nationally and internationally.

As a member of this vibrant academic community, you will benefit from a curriculum designed to challenge and inspire you, guided by highly qualified faculty who are dedicated to your success. Our goal is not only to impart knowledge but to empower you to think creatively, act decisively, and lead with confidence.

We invite you to join us in this exciting journey of growth and discovery. Together, let us build a future where innovation, leadership, and vision drive meaningful change in the world of management and economics.

**Dr. Tariq Hussain**  
PhD Economics



# ADP and BS Accounting & Finance

**Teaching Faculty**  
**Dr. Muhammad Amir Alvi**  
 (Assistant Professor)  
**Dr. Ambreen Zaineb Khurram**  
 (Assistant Professor)  
**Ms. Anam Ashraf (Lecturer)**

**Program Summary**  
 Admission Fall & Spring  
 Duration 4 years  
 No. of Semesters 8  
 Total Credit hours: 126

**Career Prospects**  
 · Accountant  
 · Financial Analyst  
 · Investment Banker  
 · Financial Planner  
 · Auditor  
 · Tax Consultant  
 · Financial Manager  
 · Portfolio Manager  
 · Risk Manager  
 · Chief Financial Officer

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3 (3-0)
SOC-501	Introduction to Sociology	2 (2-0)
AF-540	Introduction to Business	3 (3-0)
HIS-501	Introduction to History	2 (2-0)
ICT-501	Applications of Information & Communication Technology	3 (3-0)
ICP-501	Ideology and Constitution of Pakistan	2 (3-0)

### Semester 3

Course Code	Course Title	Credit Hour
AF-551	Principles of Micro Economics	3 (3-0)
QRE101	Quantitative Reasoning -I	3 (3-0)
AF-543	Business Communication	3 (3-0)
AF-521	Fundamentals of Business Finance	3 (3-0)
AF-511	Principles of Marketing	3(3-0)
AF-533	Financial Accounting -II	3(3-0)

### Semester 5

Course Code	Course Title	Credit Hour
AF-642	Business Analysis	3(3-0)
AF-607	Organizational Behavior	3 (3-0)
AF-627	Financial Statement Analysis	3(3-0)
AF-637	Public Sector Accounting	3(3-0)
AF-626	Islamic Banking and Finance	3 (3-0)

### Semester 7

Course Code	Course Title	Credit Hour
AF-663	Quantitative Techniques in Business	3(3-0)
AF-624	Risk Management	3(3-0)
AF-630	International Finance	3(3-0)
AF-631	Financial Reporting	3(3-0)
AF-629	Investment Analysis and Portfolio Management	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3 (3-0)
AF-532	Financial Accounting	3 (3-0)
ISL-501	Islamic Studies	2 (2-0)
ES-501	Environmental Sciences	3 (3-0)
AF-502	Principles of Management	3 (3-0)
ENT-501	Entrepreneurship	2 (2-0)
CCE-501	Civics & Community Engagement	2 (2-0)

### Semester 4

Course Code	Course Title	Credit Hour
QRE102	Quantitative Reasoning -II	3 (3-0)
AF-565	Banking Laws and Practices	3 (3-0)
AF-503	Fundamental of Cost Accounting	3 (3-0)
AF-542	Business Law	3 (3-0)
AF-552	Principles of Macroeconomics	3 (3-0)
THQ-501	Translation of Holy Quran	
<b>Total Credit Hours</b>		<b>66</b>

### Semester 6

Course Code	Course Title	Credit Hour
AF-636	Computerized Accounting	3(3-0)
AF-644	Business Research Method	3(3-0)
AF-628	Fundamental of Corporate Finance	3(3-0)
AF-632	Public Finance & Policy	3 (3-0)
AF-648	Business Taxation	3 (3-0)

### Semester 8

Course Code	Course Title	Credit Hour
AF-635	Audit Reporting	3 (3-0)
AF-604	Strategic Management	3 (3-0)
AF-625	Corporate Governance	3 (3-0)
AF-699	Research Project	6 (6-0)
AF-635	Audit Reporting	3 (3-0)
<b>Total Credit Hours</b>		<b>126</b>

## ADP Business Studies

**Teaching Faculty**  
**Dr Tariq Hussain**  
 (Associate Professor)  
**Dr. Ambreen Zaineb Khurram**  
 (Assistant Professor)  
**Mr. Atif Sheikh**  
 (Lecturer/PhD Scholar)  
**Ms. Laiba Naveed** (Lecturer)

### Program Summary

Admission            Fall & Spring  
 Duration             2 years  
 No. of Semesters   4  
 Total Credit hours: 66

### Career Prospects

- Management Trainee
- Business Development Officer
- Operations Manager
- Entrepreneur

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3 (3-0)
ICT-501	Applications of Information & Communication Technologies	2(2-0)
ICT-501 P	Applications of Information & Communication Technologies Lab	1(0-1)
HIS-501	History	2 (2-0)
SOC-501	Introduction to Sociology	2 (2-0)
ICP -501	Ideology & Constitution of Pakistan	2 (2-0)
BSD-501	Introduction to Business	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG -502	Expository Writing	3 (3-0)
BSD-532	Financial Accounting -I	3 (3-0)
ISL-501	Islamic Studies	2 (2-0)
ES-501	Environmental Sciences	3 (3-0)
BSD-502	Principles of Management	3 (3-0)
ENT -501	Entrepreneurship	2 (2-0)
CCE-501	Civics & Community Engagement	2 (2-0)

### Semester 3

Course Code	Course Title	Credit Hour
BSD-551	Principles of Micro Economics	3 (3-0)
QRE-501	Quantitative Reasoning -I	3 (3-0)
BSD-543	Business Communication	3 (3-0)
BSD-511	Principles of Marketing	3 (3-0)
BSD-533	Financial Accounting -II	3 (3-0)
BSD-521	Fundamentals of Business Finance	3 (3-0)

### Semester 4

Course Code	Course Title	Credit Hour
QRE-502	Quantitative Reasoning-II	3 (3-0)
BSD-512	Marketing Management	3 (3-0)
BSD-552	Principles of Macro Economics	3 (3-0)
BSD-503	Human Resource Management	3 (3-0)
BSD-542	Business Law	3 (3-0)
THQ-501	Translation of Holy Quran	Non-Credited
<b>Total Credit Hours</b>		<b>66</b>

## ADP Commerce

**Teaching Faculty**  
**Dr Tariq Hussain**  
 (Associate Professor)  
**Dr. Amir Alvi**  
 (Assistant Professor)  
**Mr. Atif Sheikh**  
 (Lecturer/PhD Scholar)  
**Ms. Anam Ashraf (Lecturer)**

### Program Summary

Admission            Fall & Spring  
 Duration             2 years  
 No. of Semesters    4  
 Total Credit hours: 66

### Career Prospects

- Business Analyst
- Marketing Researcher
- E-Commerce Specialist
- Import/Export Coordinator

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3 (3-0)
ICT-501	Applications of Information & Communication Technologies	2(2-0)
ICT-501 P	Applications of Information & Communication Technologies Lab	1(0-1)
HIS-501	History	2 (2-0)
SOC-501	Introduction to Sociology	2 (2-0)
ICP -501	Ideology & Constitution of Pakistan	2 (2-0)
COM-501	Introduction to Business	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3 (3-0)
COM-532	Financial Accounting -I	3 (3-0)
ISL-501	Islamic Studies	2 (2-0)
ES-501	Environmental Sciences	3 (3-0)
COM-502	Principles of Management	3 (3-0)
ENT-501	Entrepreneurship	2 (2-0)
CCE-501	Civics & Community Engagement	2 (2-0)

### Semester 3

Course Code	Course Title	Credit Hour
COM-551	Principles of Micro Economics	3 (3-0)
QRE-501	Quantitative Reasoning -I	3 (3-0)
COM-543	Business Communication	3 (3-0)
COM-511	Principles of Marketing	3 (3-0)
COM-533	Financial Accounting -II	3 (3-0)
COM-503	Human Resource Management	3 (3-0)

### Semester 4

Course Code	Course Title	Credit Hour
QRE-502	Quantitative Reasoning -II	3 (3-0)
COM-534	Cost Accounting	3 (3-0)
COM-552	Principles of Macro Economics	3 (3-0)
COM-561	E-Commerce & Online Entrepreneurship	3 (3-0)
COM-541	Money, Banking & Finance	3 (3-0)
COM-542	Term Project	00
THQ-501	Translation of Holy Quran	Non-Credited
<b>Total Credit Hours</b>		<b>66</b>

## ADP Supply Chain Management

**Teaching Faculty**  
**Dr Tariq Hussain**  
 (Associate Professor)  
**Dr. Ambreen Zaineb Khurram**  
 (Assistant Professor)  
**Mr. Atif Sheikh**  
 (Lecturer/PhD Scholar)  
**Ms. Hafiza Nafeesa** (Lecturer)

### Program Summary

Admission            Fall & Spring  
 Duration             2 years  
 No. of Semesters   4  
 Total Credit hours: 66

### Career Prospects

- Supply Chain Manager
- Logistics Coordinator
- Procurement Specialist
- Operations Manager

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3 (3-0)
ICT-501	Applications of Information & Communication Technologies	2(2-0)
ICT-501 P	Applications of Information & Communication Technologies Lab	1(0-1)
HIS-501	History	2 (2-0)
SOC-501	Introduction to Sociology	2 (2-0)
ICP -501	Ideology & Constitution of Pakistan	2 (2-0)
SCM-501	Introduction to Business	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3 (3-0)
SCM-532	Financial Accounting -I	3 (3-0)
ISL-501	Islamic Studies	2 (2-0)
ES-501	Environmental Sciences	3 (3-0)
SCM-502	Principles of Management	3 (3-0)
ENT-501	Entrepreneurship	2 (2-0)
CCE-501	Civics & Community Engagement	2 (2-0)

### Semester 3

Course Code	Course Title	Credit Hour
SCM-503	Supply Chain Management	3 (3-0)
QRE-501	Quantitative Reasoning -1	3 (3-0)
SCM-504	Material Management in Supply Chain	3 (3-0)
SCM-511	Principles of Marketing	3 (3-0)
SCM-505	Supply Chain Performance	3 (3-0)
SCM-506	Supply Chain Analytics	3 (3-0)

### Semester 4

Course Code	Course Title	Credit Hour
QRE-502	Quantitative Reasoning-II	3 (3-0)
SCM-507	Transportation & Logistics Management	3 (3-0)
SCM-508	Production & Operation Management	3 (3-0)
SCM-509	Supply Chain Quality Management	3 (3-0)
SCM-510	Internship Report	3 (3-0)
THQ-501	Teaching of Holy Quran	Non-Credited
<b>Total Credit Hours</b>		<b>66</b>

## ADP Supply Chain Management

**Teaching Faculty**  
**Dr Tariq Hussain**  
 (Associate Professor)  
**Dr. Ambreen Zaineb Khurram**  
 (Assistant Professor)  
**Mr. Atif Sheikh (Lecturer)**  
**Ms. Laiba Naveed (Lecturer)**

**Program Summary**  
 Admission            Fall & Spring  
 Duration                2 years  
 No. of Semesters    4  
 Total Credit hours: 66

### **Career Prospects**

- International Sales Manager
- Marketing Manager
- Export Manager
- Global Business Development Manager

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3 (3-0)
ICT-501	Applications of Information & Communication Technologies	2(2-0)
ICT-501 P	Applications of Information & Communication Technologies Lab	1(0-1)
HIS-501	History	2 (2-0)
SOC-501	Introduction to Sociology	2 (2-0)
ICP -501	Ideology & Constitution of Pakistan	2 (2-0)
ISM-501	Introduction to Business	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG -502	Expository Writing	3 (3-0)
ISM-532	Financial Accounting -I	3 (3-0)
ISL -501	Islamic Studies	2 (2-0)
ES-501	Environmental Sciences	3 (3-0)
ISM-502	Principles of Management	3 (3-0)
ENT -501	Entrepreneurship	2 (2-0)
CCE -501	Civics & Community Engagement	2 (2-0)

### Semester 3

Course Code	Course Title	Credit Hour
QRE-501	Quantitative Reasoning	3 (3-0)
ISM-551	Principles of Micro Economics	3 (3-0)
ISM-514	Social Media Marketing	3 (3-0)
ISM-511	Principles of Marketing	3 (3-0)
ISM-546	International Business	3 (3-0)

### Semester 4

Course Code	Course Title	Credit Hour
QRE -502	Quantitative Reasoning -II	3 (3-0)
ISM-506	Business Law	3 (3-0)
ISM-515	Sales Management	3 (3-0)
ISM-561	E-commerce	3 (3-0)
ISM-585	Production & Operation Management	3 (3-0)
ISM-599	Semester Project	3 (3-0)
THQ-501	Teaching of Holy Quran	Non-Credited
<b>Total Credit Hours</b>		<b>66</b>

## ADP Hotel & Tourism Management

**Teaching Faculty**  
**Dr Tariq Hussain**  
 (Associate Professor)  
**Dr. Ambreen Zaineb Khurram**  
 (Assistant Professor)  
**Mr. Atif Sheikh**  
 (Lecturer/PhD Scholar)  
**Ms. Laiba Naveed** (Lecturer)

**Program Summary**  
 Admission Fall & Spring  
 Duration 2 years  
 No. of Semesters 4  
 Total Credit hours: 66

### Career Prospects

- Hotel Manager
- Tour Operator
- Event Manager
- Travel Agent

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3 (3-0)
ICT-501	Applications of Information & Communication Technologies	2(2-0)
ICT-501 P	Applications of Information & Communication Technologies Lab	1(0-1)
HIS-501	History	2 (2-0)
SOC-501	Introduction to Sociology	2 (2-0)
ICP -501	Ideology & Constitution of Pakistan	2 (2-0)
BSD-501	Introduction to Business	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3 (3-0)
BSD-532	Financial Accounting -I	3 (3-0)
ISL-501	Islamic Studies	2 (2-0)
ES-501	Environmental Sciences	3 (3-0)
BSD-502	Principles of Management	3 (3-0)
ENT-501	Entrepreneurship	2 (2-0)
CCE-501	Civics & Community Engagement	2 (2-0)

### Semester 3

Course Code	Course Title	Credit Hour
HTM-551	Principles of Micro Economics	3 (3-0)
QRE-501	Quantitative Reasoning-I	3 (3-0)
HTM-501	Introduction to Tourism & Hotel Management	3 (3-0)
HTM-502	Tourism Marketing	3 (3-0)
HTM-503	Tourism Management	3 (3-0)
HTM-504	Tourism and Hotel Laws	3 (3-0)

### Semester 4

Course Code	Course Title	Credit Hour
QRE-502	Quantitative ReasoningII	3 (3-0)
HTM-505	Hospitality Operations	3 (3-0)
HTM-506	Public Relations	3 (3-0)
HTM-507	Restaurant Management	3 (3-0)
HTM-508	Tourism Geography	3 (3-0)
HTM-509	Internship	00
THQ-501	Teaching of Holy Quran	Non-Credited
<b>Total Credit Hours</b>		<b>66</b>



# Bachelors of Business Administration BBA

**Teaching Faculty**  
**Dr. Tariq Hussain**  
 (HoD/Associate Professor)  
**Mr. Atif Sheikh**  
 (Lecturer/PhD Scholar)  
**Ms. Hafiza Nafeesa (Lecturer)**

**Program Summary**  
 Admission Fall & Spring  
 Duration 4 years  
 No. of Semesters 8  
 Total Credit hours: 126

## Career Prospects

- Management Trainee
- Business Analyst
- Marketing Analyst
- Financial Analyst
- Human Resource Manager
- Operations Manager
- Entrepreneur
- Business Consultant
- Investment Banker
- Supply Chain Manager

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
ENG-501	Functional English	3 (3-0)
ICT-501	Applications of Information & Communication Technologies	2(2-0)
ICT-501 P	Applications of Information & Communication Technologies Lab	1(0-1)
HIS-501	History	2 (2-0)
SOC-501	Introduction to Sociology	2 (2-0)
ICP -501	Ideology & Constitution of Pakistan	2 (2-0)
BBA-540	Introduction to Business	3 (3-0)

### Semester 2

Course Code	Course Title	Credit Hour
ENG-502	Expository Writing	3 (3-0)
BBA-532	Financial Accounting -I	3 (3-0)
ISL-501	Islamic Studies	2 (2-0)
ES-501	Environmental Sciences	3 (3-0)
BBA-502	Principles of Management	3 (3-0)
ENT-501	Entrepreneurship	2 (2-0)
CCE-501	Civics & Community Engagement	2 (2-0)

### Semester 3

Course Code	Course Title	Credit Hour
BBA-551	Principles of Micro Economics	3 (3-0)
QRE101	Quantitative Reasoning -1	3 (3-0)
BBA-543	Business Communication	3 (3-0)
BBA-511	Principles of Marketing	3 (3-0)
BBA-533	Financial Accounting -II	3 (3-0)
BBA-521	Fundamentals of Business Finance	3 (3-0)

### Semester 4

Course Code	Course Title	Credit Hour
QRE102	Quantitative Reasoning-II	3 (3-0)
BBA-512	Marketing Management	3 (3-0)
BBA-552	Principles of Macro Economics	3 (3-0)
BBA-503	Human Resource Management	3 (3-0)
BBA-542	Business Law	3 (3-0)
THQ-501	Translation of Holy Quran	Non-Credited

### Semester 5

Course Code	Course Title	Credit Hour
BBA-646	International Business	3 (3-0)
BBA-662	Management Information System	3 (3-0)
BBA-622	Managerial Finance	3 (3-0)
BBA-616	Strategic Marketing	3 (3-0)
BBA-607	Organizational Behavior	3 (3-0)

### Semester 6

Course Code	Course Title	Credit Hour
BBA-653	Managerial Economics	3 (3-0)
BBA-647	Business Ethics	3 (3-0)
BBA-605	Total Quality Management	3 (3-0)
BBA-613	Consumer Behavior	3 (3-0)
	Internship	3 (3-0)

## Semester 7

Course Code	Course Title	Credit Hour
BBA-644	Business Research Methods	3 (3-0)
BBA-606	Leadership & Team Management	3 (3-0)
	Semester project	3 (3-0)
	Specialization I	3 (3-0)
	Specialization II	3 (3-0)

## Semester 8

Course Code	Course Title	Credit Hour
BBA-604	Strategic Management	3 (3-0)
BBA-625	Corporate Governance	3 (3-0)
	Specialization III	3 (3-0)
	Specialization IV	3 (3-0)
	Specialization V	3 (3-0)
<b>Total Credit Hours</b>		<b>126</b>

## AREAS OF SPECIALIZATION

### Finance

Course Code	Course Title	Credit Hour
FIN -681	International Finance	3 (3-0)
FIN -682	Financial & Regulatory Institutions	3 (3-0)
FIN -683	Security Analysis and Portfolio Management	3 (3-0)
FIN -684	Financial Risk Management	3 (3-0)
FIN -685	Financial Statement Analysis	3 (3-0)
FIN -686	Corporate Finance	3 (3-0)

### Marketing

Course Code	Course Title	Credit Hour
MKT- 690	International Marketing	3 (3-0)
MKT-691	Services Marketing	3 (3-0)
MKT-692	Advertising	3 (3-0)
MKT-693	Brand Management	3 (3-0)
MKT-694	Sales Management	3 (3-0)
MKT- 690	International Marketing	3 (3-0)

### Supply Chain Management

Course Code	Course Title	Credit Hour
OSC-601	Material Management in Supply Chain	3 (3-0)
OSC-602	Supply Chain Design	3 (3-0)
OSC-603	Supply Chains Quality Management	3 (3-0)
OSC-604	Supply Chain Performance	3 (3-0)
OSC-605	Supply Chain Management /Geography	3 (3-0)

### Information Technology

Course Code	Course Title	Credit Hour
BMI601	Computer Application	3 (3-0)
BMI602	Data Ware House	3 (3-0)
BMI603	E-business	3 (3-0)
BMI604	Enterprise Resource Planning(ERP)	3 (3-0)
BMI605	Human Resource Information System	3 (3-0)
BMI606	IT Project Management	3 (3-0)
MIS-607	Management Information System	3 (3-0)
BMI607	Systems Analysis & Design (SAD)	3 (3-0)
BMI608	Artificial Intelligence	3 (3-0)
BMI609	Emerging Trends in IT	3 (3-0)

### Entrepreneurship

Course Code	Course Title	Credit Hour
ENT-601	New Product Development	3 (3-0)
ENT-602	Business Development	3 (3-0)
ENT-603	Social Entrepreneurship/ Factual Entrepreneurship	3 (3-0)
ENT-604	Entrepreneurship	3 (3-0)
ENT-605	Family Business Management	3 (3-0)

### Human Resource Management

Course Code	Course Title	Credit Hour
HRM-602	Training and Development	3 (3-0)
HRM-603	Strategic Human Resource Management	3 (3-0)
HRM-604	Organizational Development	3 (3-0)
HRM-605	Change Management	3 (3-0)
HRM-607	Compensation and Reward Management	3 (3-0)

## Master of Business Administration (For Business Graduates)

**Teaching Faculty**  
**Dr. Tariq Hussain**  
**Dr. Amir Alvi**  
**Dr. Ambreen Zainab**  
**Mr. Atif Sheikh**

### Program Summary

Admission      Fall & Spring  
 Duration        2 years  
 No. of Semesters 4  
 Total Credit hours: 30

### Career Prospects

Leading teams as managers and executives in corporate sectors.  
 Providing business consulting for strategy development and operations.  
 Managing entrepreneurial ventures and startups.  
 Overseeing global business operations and supply chains.  
 Working in leadership roles for non-profits and public sector organizations.  
 Pursuing careers in financial management and advisory services.  
 Enhancing business processes through project management and innovation.

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
MGT-7001	Strategic Management	3(3-0)
MGT-7002	Advanced Research Methodology	3(3-0)
FIN-7003	Strategic Finance	3(3-0)

### Semester 2

Course Code	Course Title	Credit Hour
MKT-7004	Strategic Marketing	3(3-0)
XXXX	Elective – 1	3(3-0)
XXXX	Elective – 2	3(3-0)

### Semester 3&4

Course Code	Course Title	Credit Hour
XXXX	Elective -3	3(3-0)
XXXX	Elective -4	3(3-0)
XXXX	Research and Thesis/ 2 Elective Courses	6(0-6)

## Elective Courses Specialization

### Finance

Course Code	Course Title	Credit Hour
FIN-7005	Financial Institutions	3(3-0)
FIN-7006	Investment & Portfolio Management	3(3-0)
FIN-7007	Financial Reporting & Disclosure	3(3-0)
FIN-7008	Corporate Finance	3(3-0)
FIN-7009	SME Finance	3(3-0)
FIN-7010	Risk Management	3(3-0)
FIN-7011	Credit management	3(3-0)
FIN-7012	Behavioral Finance	3(3-0)
FIN-7013	Advanced Financial Management	3(3-0)
FIN-7014	International Finance	3(3-0)

### Human Resource Management

Course Code	Course Title	Credit Hour
HRM-7005	Performance Management	3(3-0)
HRM-7006	Training Intervention and Job Skills	3(3-0)
HRM-7007	Recruitment and Selection	3(3-0)
HRM-7008	Cross-Cultural Resource Management	3(3-0)
HRM-7009	Incentives & Compensation Management	3(3-0)
HRM-7010	Strategic Human Resource Management	3(3-0)
HRM-7011	Leadership & Team Management	3(3-0)
HRM-7012	Organizational Dynamics	3(3-0)
HRM-7013	Conflicts and Negotiation Management	3(3-0)
HRM-7014	Career Management	3(3-0)

## Marketing

Course Code	Course Title	Credit Hour
MKT-7005	Product and Brand Management	3(3-0)
MKT-7006	International Marketing	3(3-0)
MKT-7007	Digital Marketing	3(3-0)
MKT-7008	Promotion and Advertisement Management	3(3-0)
MKT-7009	Sales Management	3(3-0)
MKT-7010	Services Marketing	3(3-0)
MKT-7011	Distribute Management	3(3-0)
MKT-7012	Customer Relationship Marketing	3(3-0)

### Master of Business Administration (For Non Business Graduates)

**Teaching Faculty**  
**Dr. Tariq Hussain**  
**Dr. Amir Alvi**  
**Dr. Ambreen Zainab**  
**Mr. Atif Sheikh**

#### Program Summary

Admission      Fall & Spring  
 Duration        2 years  
 No. of Semesters   4  
 Total Credit hours: 30

#### Career Prospects

Leading teams as managers and executives in corporate sectors.  
 Providing business consulting for strategy development and operations.  
 Managing entrepreneurial ventures and startups.  
 Overseeing global business operations and supply chains.  
 Working in leadership roles for non-profits and public sector organizations.  
 Pursuing careers in financial management and advisory services.  
 Enhancing business processes through project management and innovation.

### SCHEME OF STUDIES

#### Semester 1

Course Code	Course Title	Credit Hour
ACC-601	Financial Accounting I	3(3-0)
FIN-701	Business Finance	3(3-0)
HRM-601	Introduction to Human Resource Management	3(3-0)
MKT-601	Principles of Marketing	3(3-0)

#### Semester 2

Course Code	Course Title	Credit Hour
FIN-702	Financial Management	3(3-0)
MGT-701	Theory And Practice of Management	3(3-0)
STAT601	Business Mathematics And Statistics	3(3-0)
ACC701	Financial Accounting II	3(3-0)
MKT701	Marketing Management	3(3-0)
ECO601	Business Economics	3(3-0)

#### Semester 3

Course Code	Course Title	Credit Hour
MKT-702	Strategic Marketing	3(3-0)
MGT-702	Strategic Management	3(3-0)
FIN-703	Strategic Finance	3(3-0)

#### Semester 4

Course Code	Course Title	Credit Hour
MGT-703	Advanced Research Methodology	3(3-0)
MGT-704	Leadership and Organizational Behavior	3(3-0)

## Elective Courses Specialization

### Finance

Course Code	Course Title	Credit Hour
FIN-5011	Financial Institutions	3(3-0)
FIN-5012	Investment & Portfolio Management	3(3-0)
FIN-5013	Financial Reporting & Disclosure	3(3-0)
FIN-5014	Corporate Finance	3(3-0)
FIN-5015	SME Finance	3(3-0)
FIN-6011	Risk Management	3(3-0)
FIN-6012	Credit management	3(3-0)
FIN-6013	Behavioral Finance	3(3-0)
FIN-6014	Advanced Financial Management	3(3-0)
FIN-6015	International Finance	3(3-0)

### Human Resource Management

Course Code	Course Title	Credit Hour
HRM -5011	Performance Management	3(3-0)
HRM -5012	Training Intervention and Job Skills	3(3-0)
HRM -5013	Recruitment and Selection	3(3-0)
HRM -5014	Cross -Cultural Resource Management	3(3-0)
HRM -5015	Incentives & Compensation Management	3(3-0)
HRM -6011	Strategic Human Resource Management	3(3-0)
HRM -6012	Leadership & Team Management	3(3-0)
HRM -6013	Organizational Dynamics	3(3-0)
HRM -6014	Conflicts and Negotiation Management	3(3-0)
HRM -6015	Career Management	3(3-0)

### Marketing

Course Code	Course Title	Credit Hour
MKT -5011	Product and Brand Management	3(3-0)
MKT -5012	International Marketing	3(3-0)
MKT -5013	Digital Marketin	3(3-0)
MKT -5014	Promotion and Advertisement Management	3(3-0)
MKT -6011	Sales Management	3(3-0)
MKT -6012	Services Marketing	3(3-0)
MKT -6013	Distribute Management	3(3-0)
MKT -6014	Customer Relationship Marketing	3(3-0)

### Message From The Dean

It is an honour to welcome you to the Faculty of Engineering and Technology, Grand Asian University Sialkot, the only purpose-built university in the region having dedicated buildings, state-of-the-art laboratories, highly qualified competent faculty and latest curricula under iconic leadership. Presently, it consists of three departments: Electrical, Mechanical and Civil Engineering & Technology offering Bachelor Programs since 2013 and Master Programs since 2022. All programs are duly approved by HEC, PEC & PTC and are taught under the semester system.

Our graduates are fully capable to address industrial challenges and societal expectations. Our approach aims at producing engineers and researchers equipped with fundamental concepts and analytical tools of contemporary engineering domain with latest knowledge, engineering skills and competence of deliverance in dynamic and evolving engineering domains.

As the Dean of this esteemed faculty, I assure you that conducive environment of GAUS and dedicated team is providing realistic engineering education based on innovative pedagogical methods to those adopting engineering as a profession through a transformative educational journey to confront ever-evolving challenges of the tech-driven world.



**Prof. Muhammad Sharif Bhatti**  
PhD Civil Engineering





## Introduction

The Faculty of Engineering and Technology is dedicated to fostering innovation and excellence in engineering education. It aims to equip students with the technical skills and theoretical knowledge necessary to meet the challenges of a rapidly evolving technological landscape. The faculty emphasizes practical experience, interdisciplinary collaboration, and research that addresses real-world problems.

## Mission

The missions of the Faculty of Engineering and Technology include providing high-quality education, promoting research and development, and fostering a culture of innovation

# FACULTY OF ENGINEERING & TECHNOLOGY

## Department of Mechanical Engineering & Technology



### Introduction

Mechanical engineering is one of the most versatile disciplines that apply principles of science for design, modeling, manufacturing, installation, maintenance, operations and analysis of mechanical systems. Mechanical Engineering covers broad range of disciplines including Materials Science, Robotics, Thermal Science, Energy, Management, Aerospace, Automotive, Biomedical, and Marine Engineering. BSc Mechanical Engineering Program at GAUS will enable you to obtain fundamental knowledge in the science of Mechanical Engineering. GAUS provides a conducive environment for obtaining theoretical & practical knowledge through highly qualified and experienced faculty, state-of-the-art laboratories, modern curriculum and industrial exposure. Our graduates will be able to exhibit leadership skills in the field as well as maintain ethical values of professional practice. BSc Mechanical Engineering program is run under the guidelines of Higher Education Commission (HEC) and Pakistan Engineering Council (PEC). Those who are good at mathematics and physics, and have intuition towards exploring the physical phenomena, are advised to choose mechanical engineering at GAUS.

### Objectives

- Play the roles ranging from design and development, research and innovation, to production management and quality control.
- Work in emerging fields like renewable energy, automation, and sustainable technologies.
- Expertise in developing efficient systems, innovative products, and sustainable solutions.
- Academia, consultancy, and project management, providing a versatile foundation for continuous professional growth and development.

## Programs Being Offered

B.Sc. Mechanical Engineering

B.Sc. Mechanical Engineering Technology

## Message From HOD



Mechanical engineering is one of the most versatile and dynamic disciplines, applying the principles of science to the design, modeling, manufacturing, installation, maintenance, operations, and analysis of mechanical systems.

The BSc Mechanical Engineering program at Grand Asian University, Sialkot (GAUS), is designed to provide students with a solid foundation in the fundamental principles of mechanical engineering. With a modern curriculum aligned with the guidelines of the Higher Education Commission (HEC) and Pakistan Engineering Council (PEC), the program ensures that students are well-equipped to meet the demands of the industry. GAUS offers a conducive learning environment, where students benefit from the expertise of highly qualified and experienced faculty, access to state-of-the-art laboratories, and industrial exposure.

The Department of Mechanical Engineering houses a robust academic community within the Faculty of Engineering and Technology, offering a vibrant platform for aspiring mechanical engineers. Through a diligent and professional approach, we strive to transform our students into technically proficient and innovative graduates who can contribute to technological advancement at both national and international levels.

The students who have a strong aptitude for mathematics and physics and a curiosity to explore and understand the physical phenomena around us, mechanical engineering at GAUS provides the perfect pathway to success. I warmly welcome you to join one of the most ambitious departments of our university and embark on a journey toward making a meaningful impact in the field of mechanical engineering and beyond.

Let's build a future fueled by innovation and excellence!

**Dr. Liaquat Ali Azhar Najmi**

Assistant Professor

Incharge Department of Mechanical Engineering

# B.Sc. Mechanical Engineering

**Teaching Faculty**  
**Dr. Ghulam Yasin Chohan**  
 (Professor & Head of Department)  
 Pride of performance-Tamgha-e-Baqa -Gold Medal KRL  
 Engr. Nadeem Iqbal  
 Engr. Haider Nawaz  
 Engr. Faheem Ejaz  
 Engr. Ali Abdul Rehman  
 Engr. Muhammad Haseeb

**Program Summary**  
 Admission Fall  
 Duration 4 Years  
 Total Semesters: 08  
 Total Credit hours: 134

## Career Prospects

- Aerospace
- Energy
- Manufacturing
- Robotics, and construction.
- Design and development,
- Research and innovation
- Production management
- Quality control
- Renewable energy
- Automation

## Semester 1

## SCHEME OF STUDIES

## Semester 2

Course Code	Course Title	Credit Hour
ISL 501/ETH 501	Islamic Studies/ Ethics	2(2-0)
MTH 520	Calculus and Analytical Geometry	3(3-0)
ENG 501	Functional English	3(3-0)
PHY 510	Applied Chemistry/ Applied Physics	2(2-0)
PHY 510 P	Applied Chemistry/ Applied Physics Lab	1(0-1)
ICT 501	Applications of ICT	2(2-0)
ICT 501 P	Applications of ICT Lab	1(0-1)
ME-610	Engineering Drawing and Graphics	1(1-0)
ME-610 P	Engineering Drawing and Graphics Lab	1(0-1)
ME-620	Workshop Practice	1(1-0)
ME-620 P	Workshop Practice Lab	1(0-1)

Course Code	Course Title	Credit Hour
MTH-527	Linear Algebra & Differential Equations	3(3-0)
EE-601	Electrical Engineering	2(2-0)
ME-611 P	Computer Aided Drawing Lab	1(0-1)
ME-611	Engineering Mechanics-I: (Statics)	3(3-0)
ME-600	Thermodynamics-I	3(3-0)
ME-621	Materials Engineering	2(2-0)
CCE 601	Civics and Community Engagement	2(2-0)
ICP 601	Ideology and Constitution of Pakistan	2(2-0)

## Semester 3

## Semester 4

Course Code	Course Title	Credit Hour
ME-613	Engineering Mechanics -II: (Dynamics)	2(2-0)
ME-614	Mechanics of Materials -I	3(3-0)
CS-501	Computer Systems and Programming	2(2-0)
CS-501 P	Computer Systems and Programming	1(0-1)
MTH-622	Complex Variables & Transforms	3(3-0)
ME-602	Fluid Mechanics -I	3(3-0)
ME-601	Thermodynamics -II	2(2-0)
ME-613 P	Engineering Mechanics Lab	1(0-1)
ME-601 P	Thermodynamics Lab	1(0-1)

Course Code	Course Title	Credit Hour
ME-630	Measurement and Instrumentation	2(2-0)
ME-615	Mechanics of Materials	3(3-0)
ME-603	Fluid Mechanics-II	2(2-0)
ME-616	Machine Design	2(2-0)
EE-604	Electronics Engineering	2(2-0)
EE-604P	Electrical and Electronics Engineering Lab	1(0-1)
ENG-502	Expository Writing	3(3-0)
ME-603L	Fluid Mechanics Lab	1(0-1)
ME-615L	Mechanics of Materials Lab	1(0-1)

## Semester 5

## Semester 6

Course Code	Course Title	Credit Hour
ME-622	Manufacturing Processes	2(2-0)
ME-622 P	Manufacturing Processes Lab	1(0-1)
ME-618	Mechanics of Machines	2(2-0)
ME-631	Control Engineering	2(2-0)
ME-604	Heat & Mass Transfer	3(3-0)
CS-521	Applied AI & Machine Learning	2(2-0)
CS-521 P	Applied AI & Machine Learning Lab	1(0-1)
ME-631 P	M&I and Control Lab	1(0-1)
MTH-651	Numerical Analysis	2(2-0)
MTH-651 P	Numerical Analysis Lab	1(0-1)

Course Code	Course Title	Credit Hour
MGT-613	Social Sciences Elective (HRM)	2(2-0)
ME-605	Heating, Ventilation and Air Conditioning	3(3-0)
ME-617	Machine Design-II	2(2-0)
ME-619	Finite Element Methods	2(2-0)
ME-619 P	Finite Element Methods Lab	1(0-1)
ME-605 P	HVAC and H&M Lab	1(0-1)
STS-501	Probability & Stochastic/ Math Elective***	3(3-0)
MGT-614	Project Management	2(2-0)

## Semester 7

## Semester 8

Course Code	Course Title	Credit Hour
ME-632	Mechanical Vibrations	3(3-0)
ME-606	Internal Combustion Engines	2(2-0)
ME-606 P	Internal Combustion Engines Lab	1(0-1)
ME-640	Technical Elective-I	3/2(3/2-0/0)
ME-640 P	Technical Elective-I Lab	1(0/0-0/1)
ENG-602	Arts and Humanities Elective (Communication and Presentation Skills)	2(2-0)
ME-632 P	Mechanisms and Mechanical Vibration Lab	1(0-1)
ME-698 P	Final Year Design Project-I	3(0-3)

Course Code	Course Title	Credit Hour
ME620	Reverse Engineering and Inspection Tec	2(2-0)
ME620P	Reverse Engineering and Inspection Tec Lab	1(0-1)
ME633	Mechatronics & Robotics Engineering	2(2-0)
ME633P	Mechatronics & Robotics Engineering Lab	1(0-1)
ME641	Technical Elective***	3/2(3/2-0/0)
ME641P	Technical Elective*** Lab	1(0/0-0/1)
ENFS01	Entrepreneurship	2(2-0)
ME623	Occupational Health & Safety	1(1-0)
ME699P	Final Year Design Project	3(0-3)
<b>Total Credit Hours</b>		<b>134</b>

# B.Sc. Mechanical Engineering & Technology

**Teaching Faculty**  
 Prof. Dr. Arshad Hussain Qureshi  
 Prof. Dr. Ghulam Yasin Chohan  
 Engr. Syed Kamal Ud Din  
 Engr. Nadeem Iqbal  
 Engr. Haider Nawaz  
 Engr. Faheem Ejaz  
 Engr. Ali Abdul Rehman  
 Engr. Muhammad Haseeb

**Program Summary**  
 Admission: Fall  
 Duration: 4 Years  
 Total Semesters: 08  
 Total Credit hours: 138

## Career Prospects

The graduate mechanical technologists can be better utilized in various local and global industries in the capacity of design, production, maintenance, quality control and planning technologists. These industries include but not limited to Automobile, Aerospace, Chemical Processing, Nuclear, Power Generation, Marine, Manufacturing and Production, Agriculture and Automation and Robotics.

## Semester 1

## SCHEME OF STUDIES

## Semester 2

Course Code	Course Title	Credit Hours
MH-112	Islamic Studies/ Professional Ethics	2(2-0)
MS-113	Applied Physics	2(2-0)
MS-113L	Applied Physics Lab	1(0-1)
MS-123	Applied Mathematics -I	3(3-0)
MS-133	Applied Chemistry	2(2-0)
MS-133L	Applied Chemistry Lab	1(0-1)
MS-143	Introduction to Computer Fundamentals	1(0-1)
MS-143L	Introduction to Computer Fundamentals Lab	2(0-2)
MT-113	Workshop Technology	1(1-0)
MT-113L	Workshop Technology Lab	2(0-2)

Course Code	Course Title	Credit Hour
MS-153	Applied Mathematic- II	2(2-0)
MH-122	Pakistan Studies	2(2-0)
MT-124	Technical Drawing and CAD	2(2-0)
MT-124L	Technical Drawing and CAD Lab	2(0-2)
MT-134	Applied Thermodynamics 1	2(2-0)
MT-134L	Applied Thermodynamics- 1 Lab	2(0-2)
MT-144	Basic Electrical & Electronics	2(2-0)
MT-144L	Basic Electrical & Electronics Lab	2(0-2)
MT-113	Workshop Technology	1(1-0)
MT-113L	Workshop Technology Lab	2(0-2)

## Semester 3

## Semester 4

Course Code	Course Title	Credit Hour
MH-213	Communication Skills	2(2-0)
MT-213	CAD - II	2(2-0)
MT-223	Industrial Material	2(2-0)
MT-223L	Industrial Material Lab	1(0-1)
MT-233	Mechanics of Material	2(2-0)
MT-233L	Mechanics of Material Lab	1(0-1)
MT-243	Applied Thermodynamics - II	2(2-0)
MT-243L	Applied Thermodynamics - II Lab	1(0-1)

Course Code	Course Title	Credit Hour
MT-253	Machine Design	3(3-0)
MT-264	Fluid Mechanics	2(2-0)
MT-264L	Fluid Mechanics Lab	2(0-2)
MT-273	Engineering Statics	2(2-0)
MT-273L	Engineering Statics Lab	1(0-1)
MS-213	Probability and Statistics	3(3-0)
MM-212	Total Quality Management	2(2-0)
MH-223	Technical Report Writing	3(3-0)

## Semester 5

## Semester 6

Course Code	Course Title	Credit Hour
MT-313	Heat Transfer	2(2-0)
MT-313L	Heat Transfer Lab	1(0-1)
MT-324	IC Engine	2(2-0)
MT-324L	IC Engine Lab	2(0-2)
MT-333	Dynamics	2(2-0)
MT-333L	Dynamics Lab	1(0-1)
MT-343	Manufacturing Processes	2(2-0)
MT-343L	Manufacturing Processes Lab	1(0-1)
MM-313	Project Management	3(3-0)
MH-312	Economics	2(2-0)

Course Code	Course Title	Credit Hour
MT-353	Instrumentation and Control	2(2-0)
MT-353L	Instrumentation and Control Lab	1(0-1)
MT-363	Mechanical Vibration	2(2-0)
MT-363L	Mechanical Vibration Lab	1(0-1)
MT-373	Refrigeration & Air Conditioning	2(2-0)
MT-373L	Refrigeration & Air Conditioning Lab	1(0-1)
MT-384	Material Handling and Safety	3(3-0)
MT-384L	Material Handling and Safety Lab	1(0-1)
MT-393L	Project I	3(0-3)
MT-3103	Project II	3(0-3)

## Semester 7

## Semester 8

Course Code	Course Title	Credit Hour
MT-4116L	16 Weeks Supervised Industrial/ Field Training (8x5=40 Hrs / Week)	16(0-16)

Course Code	Course Title	Credit Hour
MT-4216L	16 Weeks Supervised Industrial/ Field Training (8x5=40 Hrs / Week)	16(0-16)
<b>Total</b>		<b>136</b>

# FACULTY OF ENGINEERING & TECHNOLOGY

## Department of Electrical Engineering & Technology

### Introduction

Electrical Engineering is a field of Engineering that deals with study and application of principles of electricity, electronics, and magnetism. Electrical power is the backbone of modern industrial society and is expected to remain so for the foreseeable future. Electricity plays a very vital role to contribute to the socio-economic conditions in the country. The department of Electrical Engineering realizing the importance of this subject and has taken a step forward envisioning the state-of-the-art education through its well-designed courses to produce the competent engineers in the market.

Electrical Engineering and Technology department admits 80 undergraduate students each year and demand of this discipline is growing with each passing year. This department has recently been refurbished along with up gradation of its laboratories after arrival of the latest modern lab-equipment.

### Objectives

- delivering rigorous academic programs that prepare students for successful careers in engineering and technology.
- engaging in cutting-edge research that contributes to technological advancement and societal needs.
- establishing partnerships with electrical & electronics industries to enhance educational relevance and create opportunities for students.
- applying the knowledge to solve analytical and practical engineering problems.
- work for continuous socio-technical development of the society.

### Programs Being Offered

B.Sc. Electrical Engineering

B.Sc. Electrical Engineering Technology

M.Sc. Electrical Engineering  
(Electronics)

M.Sc. Electrical Engineering  
(Communication & Networks)



## Message From HOD



Electrical Engineering is a fascinating and dynamic field that focuses on the study and application of electricity, electronics, and magnetism, serving as the foundation for countless innovations and technological advancements.

Recognizing the significance of this discipline, the Department of Electrical Engineering is committed to providing state-of-the-art education through a meticulously designed curriculum. Our courses are tailored to produce highly competent and innovative engineers, equipped to meet the challenges of the evolving global market.

In order to maintain our commitment to excellence, the department has undergone significant upgrades, including the refurbishment of facilities and the installation of modern laboratory equipment. These advancements ensure that our students have access to the latest tools and technologies, enabling them to gain hands-on experience in real-world scenarios.

Our mission is to nurture future leaders in Electrical Engineering who possess the technical expertise, problem-solving skills, and ethical grounding needed to address contemporary challenges.

Join us at the Department of Electrical Engineering to embark on a journey of innovation, where you will have the opportunity to contribute to the technological advancements that shape our world. Together, we build the future, powered by electricity and inspired by innovation.

**Prof. Dr. Aftab Hussain**  
PhD Electrical Engineering

# B.Sc. Electrical Engineering

Teaching Faculty  
 Dr. Aftab Hussain (Professor)  
 Engr. Haider Nawaz  
 Dr. Tallat Mehmood Qazi  
 Engr. Abdul Muqet Shah  
 Engr. Farhan Sarwar  
 Dr. Idrees Afridi  
 Engr. Muhammad Qamar Shahzad  
 Engr. Muhammad Huzaifa Malik

**Program Summary**  
 Admission: Fall & Spring  
 Duration: 4 Years  
 Total Semesters: 08  
 Total Credit Hours: 135

## Career Prospects

- Artificial Intelligence and Machine Learning
- Biological and Medical Devices and Systems
- Communications Systems
- Computer Architecture
- Computational Fabrication and Manufacturing
- Educational Technology
- Electronic, Magnetic, Optical and Quantum Materials and Devices
- Energy
- Integrated Circuits and Systems
- Nanoscale Materials, Devices, and Systems
- Robotics
- Signal Processing
- Systems and Networking
- Systems Theory, Control, and Autonomy

## Semester 1

## SCHEME OF STUDIES

## Semester 2

Course Code	Course Title	Credit Hour
ENG 501	Functional English	3(3-0)
MTH 520	Calculus & Analytical Geometry/Applied Calculus	3(3-0)
EE 601	Linear Circuit Analysis	4(3-0)
EE 601P	Linear Circuit Analysis Lab	1(0-1)
ICT 501	Application of ICT	2(2-0)
ICT 501P	Application of ICT Lab	1(0-1)
ME 602P	Engineering Drawing	1(0-1)
PHY 510	Applied Physics	2(2-0)
PHY 510P	Applied Physics Lab	1(0-1)

Course Code	Course Title	Credit Hour
MTH 607	Differential Equation	3(3-0)
EE 660	Math's /Natural Science Elective (Discrete Mathematics)	3(3-0)
ISL 501	Islamic Studies /Ethics	2(2-0)
ICP 601	Ideology & constitution of Pakistan	2(2-0)
CS4 501	Computer Programing	3(3-0)
CS4 501 P	Computer Programing Lab	1(0-1)
ME 602	Thermodynamics	3(3-0)
EE 603 P	Electrical Workshop Practice	1(0-1)

## Semester 3

## Semester 4

Course Code	Course Title	Credit Hour
MTH 622	Complex Variables & Transforms	3(3-0)
ENG 502	Expository writing	3(3-0)
EE 604	Digital Logic Design	3(3-0)
EE 604P	Digital Logic Design Lab	1(0-1)
EE 605	Data Structures and Algorithms	3(3-0)
EE 605P	Data Structures and Algorithms Lab	1(0-1)
EE 606	Electrical Network Analysis	3(3-0)
EE 606P	Electrical Network Analysis Lab	1(0-1)

Course Code	Course Title	Credit Hour
MGT 614	Engineering Management (project management)	2(2-0)
MTH 528	Linear Algebra	3(3-0)
ETH 501	Arts & Humanities Elective (Professional Ethics)	2(2-0)
EE 607	Probability Methods in Engineering	3(3-0)
EE 608	Signal & Systems	3(3-0)
EE 608P	Signal & Systems Lab	1(0-1)
EE 609	Electronics Devices & Circuits	3(3-0)
EE 609P	Electronics Devices & Circuits Lab	1(0-1)
THQ 501	Teaching of Holy Quran	Non Credit

## Semester 5

## Semester 6

Course Code	Course Title	Credit Hour
EE 610	Electrical Machines	3(3-0)
EE 610P	Electrical Machines Lab	1(0-1)
EE 611	Microprocessors & Interfacing	3(3-0)
EE 611P	Microprocessors & Interfacing Lab	1(0-1)
EE 612	Communications Systems	3(3-0)
EE 612P	Communications Systems Lab	1(0-1)
CCE 601	Civics & Community Engagement	2(20)
EE 613	Electromagnetic Theory	3(3-0)
OHS 501	Occupational Health & Safety	1(1-0)

Course Code	Course Title	Credit Hour
EE 614	Linear Control Systems	3(3-0)
EE 614 P	Linear Control Systems Lab	1(0-1)
EE 615	Power Distribution & Utilization	3(3-0)
EE 615 P	Power Distribution & Utilization Lab	1(0-1)
EE 616	Computer Communication Networks	3(3-0)
MGT 660	Engineering Economics	3(3-0)

## Semester 7

## Semester 8

Course Code	Course Title	Credit Hour
EE 617	Operating System	3(3-0)
EE 617P	Operating System Lab	1(0-1)
EE 618	Data Communication	3(3-0)
EE 618P	Data Communication Lab	1(0-1)
EE 619	Industrial Control Systems	3(3-0)
EE 619P	Industrial Control Systems Lab	1(0-1)
EE 699a	Project (Phase I)	2(0-2)
ENT 501	Entrepreneurship	2(2-0)

Course Code	Course Title	Credit Hour
EE 622	Renewable Energy Systems	3(3-0)
EE 623	Artificial Intelligence	3(3-0)
MGT 613	Total Quality Management	2(20)
EE 624	Integrated Electronic Circuits	3(3-0)
EE 624P	Integrated Electronic Circuits Lab	1(0-1)
EE 699b	Project (Phase II)	4(0-4)
<b>Total Credit Hours</b>		<b>135</b>

# B.Sc. Electrical Engineering & Technology

**Teaching Faculty**  
 Prof. Dr. Muhammad Umar farooq  
 Prof. Dr. Muhammad Zafrullah  
 Dr. Abdul Samad Assistant Professor  
 Dr. Idress Afridi Assisatnt Professor  
 Rashid Jamil Satti Lecturer  
 Talha Arshad Lecturer

## Program Summary

Admission            Fall  
 Duration             4 Years  
 Total Semesters:    08  
 Total Credit hours:  134

## Career Prospects

The graduate mechanical technologists can be better utilized in various local and global industries in the capacity of design, production, maintenance, quality control and planning technologists. These industries include but not limited to Automobile, Aerospace, Chemical Processing, Nuclear, Power Generation, Marine, Manufacturing and Production, Agriculture and Automation and Robotics.

## Semester 1

## SCHEME OF STUDIES

## Semester 2

Course Code	Course Title	Credit Hour
EH-112	Islamic Studies / Professional Ethics	2(2-0)
ES-113	Applied Mathematics -I	3(3-0)
ES-123	Applied Physics	2(2-0)
ES-123 L	Applied Physics Lab	1(0-1)
ET-114	Linear Circuits Analysis	2(2-0)
ET-114 L	Linear Circuits Analysis Lab	1(0-1)
ET-123	Engineering Drawing	1(1-0)
ET-123 L	Engineering Drawing Lab	2(0-2)
ES-133	Introduction to Computer Fundamentals	1(1-0)
ES-133 L	Introduction to Computer Fundamentals Lab	2(0-2)

Course Code	Course Title	Credit Hour
EH-123	Communication Skills	3(3-0)
EH-132	Pakistan Studies	2(2-0)
ET-134	Electronics	2(2-0)
ET-134 L	Electronics Lab	2(0-2)
ET-143	Basic Mechanical Technology	2(2-0)
ET-143 L	Basic Mechanical Technology Lab	1(0-1)
ES-143	Applied Mathematics - II	3(3-0)
ET-153	Electrical Machines - I	2(2-0)
ET-153 L	Electrical Machines - I Lab	1(0-1)

## Semester 3

## Semester 4

Course Code	Course Title	Credit Hour
ET-212	Power Generation Systems	2(2-0)
EH-213	Technical Report Writing	3(3-0)
ET-224	Electrical Instruments and Measurements	2(2-0)
ET-224 L	Electrical Instruments and Measurements Lab	2(0-2)
ET-224	Electrical Instruments and Measurements	2(2-0)
ET-224 L	Electrical Instruments and Measurements Lab	2(0-2)
ET-244	Digital Electronics	2(2-0)
ET-244 L	Digital Electronics Lab	2(0-2)

Course Code	Course Title	Credit Hour
ET-254	AC Circuits Analysis	2(2-0)
ET-254 L	AC Circuits Analysis Lab	2(0-2)
ET-262	Electro-Magnetic Fields	2(2-0)
ET-273	Electrical Power Transmission	2(2-0)
ET-273 L	Electrical Power Transmission Lab	1(0-1)
ET-283	Electrical Power Distribution and Utilization	2(2-0)
ET-283 L	Electrical Power Distribution and Utilization Lab	1(0-1)
ET-294	Power Electronics	2(2-0)
ET-294 L	Power Electronics Lab	2(0-2)

## Semester 5

## Semester 6

Course Code	Course Title	Credit Hour
ET-313	Micro-Processor Theory & Interfacing	2(2-0)
ET-313 L	Micro-Processor Theory & Interfacing Lab	1(0-1)
ET-323	Switch Gear & Protective Devices	2(2-0)
ET-323 L	Switch Gear & Protective Devices Lab	1(0-1)
ET-334	Communications Technology	2(2-0)
ET-334 L	Communications Technology Lab	2(0-2)
ET-343	Control Technology	2(2-0)
ET-343	Control Technology Lab	1(0-1)
EM-312	Total Quality Management	2(2-0)
ET-353	High Voltage Technology	2(2-0)
ET-353	High Voltage Technology	1(0-1)

Course Code	Course Title	Credit Hour
EM-323	Project Management	3(3-0)
ET-362	Power System Analysis	2(0-2)
ET-374	Data & Computer Communication	2(2-0)
ET-374 L	Data & Computer Communication Lab	2(0-2)
ET-384	Industrial Drives & PLC	2(2-0)
ET-384 L	Industrial Drives & PLC Lab	2(0-2)
ET-393	Project	3(0-3)

## Project Work

Course Code	Course Title	Credit Hour
ET-3103	Project (Continue)	3(0-3)

## Semester 7

## Semester 8

Course Code	Course Title	Credit Hour
ET-416	16 Weeks Supervised Industrial/ Field Training (8x5=40 Hrs / Week)	16(0-16)

Course Code	Course Title	Credit Hour
ET-416	16 Weeks Supervised Industrial/ Field Training (8x5=40 Hrs / Week)	16(0-16)

# M.Sc. Electrical Engineering (Electronics)

**Teaching Faculty**  
 Dr. Aftab Hussain (Professor)  
 Engr. Haider Nawaz  
 Dr. Tallat Mehmood Qazi  
 Engr. Abdul Muqet Shah  
 Engr. Farhan Sarwar  
 Dr. Idrees Afridi  
 Engr. Muhammad Qamar Shahzad  
 Engr. Muhammad Huzaifa Malik

**Program Summary**  
 Admission: Fall & Spring  
 Duration: 4 Years  
 Total Semesters: 08  
 Total Credit Hours: 135

## Career Prospects

- Artificial Intelligence and Machine Learning
- Biological and Medical Devices and Systems
- Communications Systems
- Computer Architecture
- Computational Fabrication and Manufacturing
- Educational Technology
- Electronic, Magnetic, Optical and Quantum Materials and Devices
- Energy
- Integrated Circuits and Systems
- Nanoscale Materials, Devices, and Systems
- Robotics
- Signal Processing
- Systems and Networking
- Systems Theory, Control, and Autonomy

## Semester 1

## SCHEME OF STUDIES

## Semester 2

Course Code	Course Title	Credit Hour
EE 7201	Semiconductor Materials and Technology	3(3-0)
EE 7202	Integrated Circuit Design	3(3-0)
EE 7203	Embedded Systems	3(2-0)
EE 7003	Random Variables and Stochastic Processes	3(3-0)

Course Code	Course Title	Credit Hour
EE 7208	FPGA based System Design	3(3-0)
EE 7207	Advanced Digital Design	3(3-0)
EE 7209	VLSI Testing and Verification	3(2-0)
EE 7001	Research Methodology	3(3-0)

## Semester 3

## Semester 4

Course Code	Course Title	Credit Hour
EE 7300	Thesis	3(3-0)

Course Code	Course Title	Credit Hour
EE 7300	Thesis	3(3-0)
<b>Total Credit Hours</b>		<b>30</b>



# M.Sc. Electrical Engineering (Communication & Networks)

**Teaching Faculty**  
 Dr. Aftab Hussain (Professor)  
 Engr. Haider Nawaz  
 Dr. Tallat Mehmood Qazi  
 Engr. Abdul Muqet Shah  
 Engr. Farhan Sarwar  
 Dr. Idrees Afridi  
 Engr. Muhammad Qamar Shahzad  
 Engr. Muhammad Huzaifa Malik

**Program Summary**  
 Admission: Fall & Spring  
 Duration: 4 Years  
 Total Semesters: 08  
 Total Credit Hours: 135

## Career Prospects

- Artificial Intelligence and Machine Learning
- Biological and Medical Devices and Systems
- Communications Systems
- Computer Architecture
- Computational Fabrication and Manufacturing
- Educational Technology
- Electronic, Magnetic, Optical and Quantum Materials and Devices
- Energy
- Integrated Circuits and Systems
- Nanoscale Materials, Devices, and Systems
- Robotics
- Signal Processing
- Systems and Networking
- Systems Theory, Control, and Autonomy

## Semester 1

## SCHEME OF STUDIES

## Semester 2

Course Code	Course Title	Credit Hour
EE 7303	Computer Networks	3(3-0)
EE 7302	Digital Communication	3(3-0)
EE 7004	Numerical Techniques	3(2-0)
EE 7003	Random Variables and Stochastic Processes	3(3-0)

Course Code	Course Title	Credit Hour
EE 7310	Optical Communication	3(3-0)
EE 7309	Wireless communication	3(3-0)
EE 7312	Error Control Coding	3(2-0)
EE 7001	Research Methodology	3(3-0)

## Semester 3

## Semester 4

Course Code	Course Title	Credit Hour
EE 7300	Thesis	3(3-0)

Course Code	Course Title	Credit Hour
EE 7300	Thesis	3(3-0)
<b>Total Credit Hours</b>		<b>30</b>



# FACULTY OF ENGINEERING & TECHNOLOGY

## Department of Civil Engineering

### Introduction

Civil engineering is the branch of Engineering that will teach you as to how to develop and manage our society for a better future. The buildings, bridges, dams and other facilities are designed, constructed and managed by Civil Engineers that always remain a sign of pride and professional satisfaction for them. At the Grand Asian University, Sialkot, civil engineering curriculum has been developed to include all the modern aspects of this engineering field to be taught under the Outcome Based Education (OBE) System.

### Objectives

- delivering rigorous academic programs that prepare students for successful careers in engineering and technology.
- engaging in cutting-edge research that contributes to technological advancement and societal needs.
- establishing partnerships with civil and construction industries to enhance educational relevance and create opportunities for students.
- applying the knowledge to solve analytical and practical engineering problems.
- work for continuous socio-technical development of the society.

## Programs Being Offered

B.Sc. Civil Engineering

B.Sc. Civil Engineering Technology



## Message From HOD



Civil Engineering is one of the most vital and dynamic branches of Engineering, shaping the foundation of modern society and paving the way for sustainable development. It is a field that combines technical expertise, creative problem-solving, and environmental stewardship to build the world around us. Every structure designed, built and maintained by civil engineers stands as a testament to their dedication, innovation, and professional pride.

At the Grand Asian University, Sialkot, the Department of Civil Engineering is committed to nurturing the next generation of visionary Engineers. Our curriculum is thoughtfully designed to encompass all modern advancements and emerging trends in this ever-evolving discipline. Delivered under the globally recognized Outcome-Based Education (OBE) System, our program ensures that students acquire not only technical knowledge but also the practical skills, leadership qualities and ethical standards required to excel in

their careers. Our department offers state-of-the-art laboratories, project-based learning opportunities, and exposure to real-world challenges through internships and collaborations with industry leaders.

As you embark on this transformative journey with us, I encourage you to embrace the challenges and opportunities this field offers. Civil Engineering is not just a profession but a commitment to building a better future for generations to come. Together, let us strive to create solutions that stand the test of time and leave a lasting legacy of progress and excellence.

**Prof. Dr. Muhammad Sharif Bhatti**  
PhD Civil Engineering

# B.Sc. Civil Engineering

Teaching Faculty  
 Dr. Muhammad Sharif Bhatti (Professor)  
 Dr. Arshad Hussain Qureshi (Professor)  
 Engr. Syed Kamal Ud Din  
 Engr. Abdul Muqet Shah  
 Engr. Farhan Sarwar  
 Engr. Tariq Naveed  
 Engr. Subhana Liaqat  
 Dr. Abdul Samad  
 Engr. Muhammad Qamar Shahzad  
 Engr. Muhammad Huzaifa Malik

Admission                      Fall  
 Duration                        4 Years  
 Total Semesters:            08  
 Total Credit Hours         136

## Career Prospects

- Construction/design of buildings, Highways, Dams, Bridges,
- Irrigation network and water supply systems.
- Research based projects

## Semester 1

## SCHEME OF STUDIES

## Semester 2

Course Code	Course Title	Credit Hour
ENG 501	Functional English	3(3-0)
MTH 520	Calculus & Analytical Geometry/Algebra	3(3-0)
EE 601	Linear Circuit Analysis	3(3-0)
EE 60P	Linear Circuit Analysis Lab	1(0-1)
ICT 501	Application of ICT	2(2-0)
ICT 50P	Application of ICT Lab	1(0-1)
ME 60P	Engineering Drawing	1(0-1)
PHY 510	Applied Physics	2(2-0)
PHY 51P	Applied Physics Lab	1(0-1)

Course Code	Course Title	Credit Hour
MTH 607	Differential Equation	3(3-0)
EE 660	Math's /Natural Science Elective ( Discrete Mathematics)	3(3-0)
ISL 501	Islamic Studies /Ethics	2(2-0)
ICP 601	Ideology & constitution of Pakistan	2(2-0)
CS4 501	Computer Programing	3(3-0)
CS4 501 P	Computer Programing Lab	1(0-1)
ME 602	Thermodynamics	3(3-0)
EE 603 P	Electrical Workshop Practice	1(0-1)

## Semester 3

## Semester 4

Course Code	Course Title	Credit Hour
MTH 622	Complex Variables & Transforms	3(3-0)
ENG 502	Expository writing	3(3-0)
EE 604	Digital Logic Design	3(3-0)
EE 604P	Digital Logic Design Lab	1(0-1)
EE 605	Data Structures and Algorithms	3(3-0)
EE 605P	Data Structures and Algorithms Lab	1(0-1)
EE 606	Electrical Network Analysis	3(3-0)
EE 606P	Electrical Network Analysis Lab	1(0-1)

Course Code	Course Title	Credit Hour
MGT 614	Engineering Management (project management)	2(2-0)
MTH 528	Linear Algebra	3(3-0)
ETH 501	Arts & Humanities Elective (Professional Ethics)	2(2-0)
EE 607	Probability Methods Engineering	3(3-0)
EE 608	Signal & Systems	3(3-0)
EE 608P	Signal & Systems Lab	1(0-1)
EE 609	Electronics Devices & Circuits	3(3-0)
EE 609P	Electronics Devices & Circuits Lab	1(0-1)
THQ 501	Teaching of Holy Quran	(0-0)

## Semester 5

## Semester 6

Course Code	Course Title	Credit Hour
EE 610	Electrical Machines	3(3-0)
EE 610P	Electrical Machines Lab	1(0-1)
EE 611	Microprocessors & Interfacing	3(3-0)
EE 611P	Microprocessors & Interfacing Lab	1(0-1)
EE 612	Communications Systems	3(3-0)
EE 612P	Communications Systems Lab	1(0-1)
CCE 601	Civics & Community Engagement	2(2-0)
EE 613	Electromagnetic Theory	3(3-0)
OHS 501	Occupational Health & Safety	1(1-0)

Course Code	Course Title	Credit Hour
EE 614	Linear Control Systems	3(3-0)
EE 614P	Linear Control Systems Lab	1(0-1)
EE 615	Power Distribution & Utilization	3(3-0)
EE 615P	Power Distribution & Utilization Lab	1(0-1)
EE 616	Computer Communication Networks	3(3-0)
MGT 660	Engineering Economics	3(3-0)

## Semester 7

## Semester 8

Course Code	Course Title	Credit Hour
EE 617	Operating System	3(3-0)
EE 617P	Operating System Lab	1(0-1)
EE 618	Data Communication	3(3-0)
EE 618P	Data Communication Lab	1(0-1)
EE 619	Industrial Control Systems	3(3-0)
EE 619P	Industrial Control Systems Lab	1(0-1)
EE 699a	Project (Phase)	2(0-2)
ENT 501	Entrepreneurship	2(2-0)

Course Code	Course Title	Credit Hour
EE 622	Renewable Energy systems	3(3-0)
EE 623	Artificial Intelligence	3(3-0)
MGT 613	Total Quality Management	2(2-0)
EE 624	Integrated Electronic Circuits	3(3-0)
EE 624 P	Integrated Electronic Circuits Lab	1(0-1)
EE 699b	Project (Phase -II)	4(0-4)
<b>Total Credit Hours</b>		<b>135</b>

# B.Sc. Civil Engineering & Technology

**Teaching Faculty**  
**Prof. Dr. Shareef Bhatti**  
**Engr. Abdul Muqet Shah**  
**Engr. Farhan Sarwar**  
**Engr. Talha Akram**

**Program Summary**  
 Admission: Fall  
 Duration: 4 Years  
 Total Semesters: 08  
 Total Credit hours: 130-137

## Career Prospects

Civil engineering technologists have become experts in creating sustainable and environmentally friendly buildings and systems. Multiplied over many communities, the energy and emissions savings can make a real difference in the environment. Civil engineering is open to many career opportunities and handles different types of projects like construction and rehabilitation of buildings, roadways, railways, skyscrapers, urban establishments, agricultural storages and development of new materials and procedures etc.

## Semester 1

## SCHEME OF STUDIES

## Semester 2

Course Code	Course Title	Credit Hour
CE-601	Civil Engineering Materials	2(2-0)
CE-601L	Civil Engineering Materials Lab	1(0-1)
PHY-510	Applied Physics & Electro-Mechanical Fundamentals	2(2-0)
PHY 510L	Applied Physics & Electro-Mechanical Fundamentals	1(0-1)
CE-602	Engineering Drawing	1(1-0)
CE-602L	Engineering Drawing Lab	2(0-2)
ENG-501	Functional English	3(3-0)
QRE-501	Quantitative Reasoning I	3(3-0)
ICT-501	Applications of ICT	2(2-0)
ICT-501L	Applications of ICT Lab	1(0-1)

Course Code	Course Title	Credit Hour
CE-603	Engineering Surveying	2(2-0)
CE-603L	Engineering Surveying Lab	1(0-1)
CE-631	Geology for Engineers	2(2-0)
ISL-501	Islamic Studies/ Ethics	2(2-0)
CE-621	Engineering Mechanics	2(2-0)
CE-621L	Engineering Mechanics Lab	1(0-1)
ICP-601	Ideology and Constitution of Pakistan	2(2-0)
CS-102	Computer Programming	2(2-0)
CS-102L	Computer Programming Lab	1(0-1)
QRE-502	Quantitative Reasoning -II	3(3-0)

## Semester 3

## Semester 4

Course Code	Course Title	Credit Hour
CE-604	Advanced Engineering Surveying	2(2-0)
CE-604L	Advanced Engineering Surveying Lab	1(0-1)
CE-651	Fluid Mechanics	2(2-0)
CE-651L	Fluid Mechanics Lab	1(0-1)
CE-622	Mechanics of Solids-I	2(2-0)
CE-622L	Mechanics of Solids-I Lab	1(0-1)
CE-623	Structural Analysis-I	3(3-0)
MTH-503	Advanced Calculus	3(3-0)
ENG-502	Expository Writing	3(3-0)

Course Code	Course Title	Credit Hour
CE-611	Construction Engineering	2(2-0)
CE-306	Arts and Humanities Elective (Professional Ethics)	2(2-0)
MA-111	Applied Mathematics	3(3-0)
CE-624	Mechanics of Solids-II	2(2-0)
CE-624L	Mechanics of Solids-II Lab	1(0-1)
CE-632	Soil Mechanics	2(2-0)
CE-632L	Soil Mechanics Lab	1(0-1)
CE-612	Quantity & Cost Estimation	2(2-0)
CE-612L	Quantity & Cost Estimation Lab	1(0-1)
CE-304	Project Management	2(2-0)
CE-659	Survey Camp	NC

## Semester 5

## Semester 6

Course Code	Course Title	Credit Hour
CE-652	Advanced Fluid Mechanics	2(2-0)
CE-652L	Advanced Fluid Mechanics Lab	1(0-1)
CE-605	Civil Engg. Drawing & Graphics	1(1-0)
CE-605L	Civil Engg. Drawing & Graphics Lab	2(0-2)
CE-633	Geotechnical Engineering	3(3-0)
CE-633L	Geotechnical Engineering Lab	1(0-1)
CE-625	Reinforced Concrete Design-I	3(3-0)
CE-625L	Reinforced Concrete Design-I Lab	1(0-1)
CCE-601	Civics and Community Engagement	2(2-0)
CE-661	Highway & traffic Engineering	2(2-0)

Course Code	Course Title	Credit Hour
CE-626	Reinforced Concrete Design-II	3(3-0)
CE-626L	Reinforced Concrete Design-II Lab	1(0-1)
CE-606	Environmental Engineering	2(2-1)
CE-606L	Environmental Engineering Lab	1(0-1)
CE-627	Structural Analysis -II	3(3-0)
CE-653	Engineering Hydrology	2(2-0)
CE-653L	Engineering Hydrology Lab	1(0-1)
MTH-651	Numerical Analysis	3(3-0)
CE-556	Community Service	NC
CE-557	Internship (6-8 weeks) mandatory and qualifying	NC

## Semester 7

## Semester 8

Course Code	Course Title	Credit Hour
CE-628	Foundation Engineering	2(2-0)
CE-662	Pavement Analysis & design	2(2-0)
CE-662L	Pavement Analysis & design Lab	1(0-1)
CE-607	Modelling & Simulation	1(1-0)
CE-607L	Modelling & Simulation Lab	1(0-1)
CE-654	Hydraulics Engineering	2(2-0)
CE-654L	Hydraulics Engineering Lab	1(0-1)
ENT-601	Entrepreneurship	2(2-0)
CE-698	FYDP Part-I	3(0-3)

Course Code	Course Title	Credit Hour
CE-655	Irrigation Engineering	2(2-0)
CE-655L	Irrigation Engineering Lab	1(0-1)
CE-634	Geoinformatics	1(1-0)
CE-634L	Geoinformatics Lab	1(0-1)
CE-629	Steel Structures	2(2-0)
CE-641	Architecture & Town Planning	2(2-0)
CE-608	Occupational Health & Safety	1(1-0)
CE-658	Economics Elective (Engineering Economics)	2(2-0)
CE-699	FYDP Part-II	3(0-3)
<b>Total</b>		<b>136</b>

## FACULTY OF PHARMACY

### Message From The Dean

It is with great pride and enthusiasm that I welcome you to our esteemed institution, a beacon of academic excellence and innovation in Sialkot, Pakistan. At Grand Asian University, we are committed to fostering an environment where intellectual curiosity, diversity and leadership converge to shape the next generation of global thinkers and innovators.

Our institution has long stood as a leader in research, education and community engagement. We are dedicated to provide students with transformative learning experiences that prepare them to tackle the complex challenges of the 21st century. Through state-of-the-art facilities, cutting-edge research and a faculty, we aim to equip our students with the knowledge, skills and values essential for success in an ever-evolving global landscape.

As you embark on your educational journey with us, we encourage you to challenge yourself, explore new frontiers of knowledge and contribute to the greater good. Our programs are designed to be rigorous, yet supportive, ensuring that each of you is empowered to achieve your highest potential.

I invite you to explore all that Grand Asian University has to offer and to become an integral part of our shared mission to create a better, more just and sustainable health activists for the world.

Welcome to Grand Asian University, where your future begins.



**Prof. Dr. Sherjeel Adnan**  
Dean Faculty of Pharmacy

## FACULTY OF PHARMACY

### Mission

The Doctor of Pharmacy program is dedicated to create a pharmaceutical educational and research environment that emphasizes cutting-edge knowledge and innovation. We are committed to nurturing integrity in our students through the use of specialized resources, ensuring that our initiatives align with the Sustainable Development Goals (SDG) to enhance health and well-being of communities.

### Objectives

The Faculty of Pharmacy at Grand Asian University, Sialkot, is dedicated to advancing pharmaceutical education, research, and healthcare practices in line with global standards. Our primary objectives are to

- deliver Comprehensive Pharmaceutical Education
- promote Excellence in Research and Innovation
- develop Competent Healthcare Professionals
- uphold Ethical and Professional Standards
- contribute to Healthcare Policy and Practice

## Programs Being Offered

Doctor of Pharmacy (Pharm-D)

M.Phil. Pharmacy (Pharmaceutics)

M.Phil. Pharmacy (Pharmaceutical Chemistry)

## Doctor of Pharmacy (Pharm-D)

**Teaching Faculty**  
 Dr. Asad Hamad (Associate Professor)  
 Dr. Anjum Khursheed (Assistant Professor)  
 Dr. Ambreen Mehmood (Assistant Professor)  
 Mr. Adil Iqbal Qazi (Lecturer)  
 Mr. Rashid Mehmood (Lecturer)  
 Ms. Sana Saeed (Lecturer)  
 Ms. Faiza Naeem (Lecturer)  
 Mr. Usman Shahid (Lecturer)  
 Mr. Israr ul Haq (Lecturer)  
 Ms. Rubab Ijaz (Lecturer)  
 Dr. Anjum Khursheed (Assistant Professor)  
 Ms. Gull e Fatima (Lecturer)  
 Mr. Ahsan Arif (Demonstrator)

**Program Summary**  
 Admission Fall  
 Duration 5 Years  
 Semesters 10  
 Total Credit Hours 198

### Career Prospects

- Pharmaceutical Industry
- Regulatory Affairs
- Forensic pharmacist
- DRAP
- Drug Inspectors
- Academia and Research and Development organizations
- Hospital and Clinical Pharmacy
- Pharmaceutical Sales and Marketing
- Entrepreneurship and Public Health
- Biotechnology Firms
- Contract Research Organizations (CROs)

## SCHEME OF STUDIES

### Semester 1

Course Code	Course Title	Credit Hour
PHRM – 601	Pharmaceutics– IA (Physical Pharmacy)	3(3-0)
PHRM – 601 P	Pharmaceutics– IA (Physical Pharmacy) Lab	1(0-1)
PHRM – 602	Pharmaceutical Chemistry IA (Organic Chemistry)	3(3-0)
PHRM – 602 P	Pharmaceutical Chemistry IA (Organic Chemistry) Lab	1(0-1)
PHRM – 603	Pharmaceutical Chemistry- IIA (Biochemistry)	3(3-0)
PHRM – 603 P	Pharmaceutical Chemistry- IIA (Biochemistry) Lab	1(0-1)
PHRM- 604	Physiology– A	3(3-0)
PHRM- 604 P	Physiology– A Lab	1(0-1)
PHRM – 605	Anatomy & Histology	3(3-0)
PHRM – 605 P	Anatomy & Histology Lab	1(0-1)
PHRM – 61	English– A (Functional English)	2(2-0)

### Semester 2

Course Code	Course Title	Credit Hour
PHRM – 606	Pharmaceutics – IB (Physical Pharmacy)	3(3-0)
PHRM – 606 P	Pharmaceutics – IB (Physical Pharmacy) Lab	1(0-1)
PHRM – 607	Pharmaceutical Chemistry-IB (Organic Chemistry)	3(3-0)
PHRM – 607 P	Pharmaceutical Chemistry-IB (Organic Chemistry) Lab	1(0-1)
PHRM – 608	Pharmaceutical Chemistry – IIB (Biochemistry)	3(3-0)
PHRM – 608 P	Pharmaceutical Chemistry – IIB (Biochemistry) Lab	1(0-1)
PHRM – 609	Physiology – B	3(3-0)
PHRM – 609 P	Physiology – B Lab	1(0-1)
PHRM- 611	English – B (Communication & Writing Skills)	2(2-0)

### Semester 3

Course Code	Course Title	Credit Hour
PHRM – 617	Pharmaceutics – IIA (Dosage Form Science)	3(3-0)
PHRM – 617 P	Pharmaceutics – IIA (Dosage Form Science) Lab	1(0-1)
PHRM – 618	Pharmaceutics – IIIA (Pharmaceutical Microbiology & Immunology)	3(3-0)
PHRM – 618 P	Pharmaceutics – IIIA (Pharmaceutical Microbiology & Immunology) Lab	1(0-1)
PHRM– 619	Pharmacology & Therapeutics - IA	3(3-0)
PHRM – 619 P	Pharmacology & Therapeutics - IA (Practical)	1(0-1)
PHRM- 620	Pharmacognosy – IA (Basic)	3(3-0)
PHRM- 620 P	Pharmacognosy – IA (Basic) (Practical)	1(0-1)
PHRM – 612	Pharmacy Practice – IA (Pharmaceutical Mathematics)	03(3-0)
PHRM – 613	Islamic Studies	03(3-0)

### Semester 4

Course Code	Course Title	Credit Hour
PHRM – 621	Pharmaceutics – IIB (Dosage Form Science)	3(3-0)
PHRM – 621 P	Pharmaceutics – IIB (Dosage Form Science) Lab	1(0-1)
PHRM – 622	Pharmaceutics – IIIB (Pharmaceutical Microbiology & Immunology)	3(3-0)
PHRM – 622 P	Pharmaceutics – IIIB (Pharmaceutical Microbiology & Immunology) Lab	1(0-1)
PHRM – 623	Pharmacology & Therapeutics – IB	3(3-0)
PH RM– 623 P	Pharmacology & Therapeutics – IB (Practical)	1(0-1)
PHRM- 624	Pharmacognosy – IB (Basic)	3(3-0)
PHRM- 624 P	Pharmacognosy – IB (Basic) (Practical)	1(0-1)
PHRM– 614	Pharmacy Practice – IB (Bio-statistics)	03(3-0)
PHRM – 615	Pakistan Studies	2(2-0)



## Semester 5

Course Code	Course Title	Credit Hour
PHRM – 625	Pharmacy Practice- IIA (Dispensing Pharmacy)	3(3-0)
PHRM-625 P	Pharmacy Practice- IIA (Dispensing Pharmacy)Lab	1(0-1)
PHRM – 626	Pharmaceutical Chemistry- IIIA (Pharmaceutical Analysis)	3(3-0)
PHRM – 626 P	Pharmaceutical Chemistry- IIIA (Pharmaceutical Analysis)Lab	1(0-1)
PHRM – 627	Pharmacology & Therapeutics- IIA	3(3-0)
PHRM-627 P	Pharmacology & Therapeutics- IIA Lab	1(0-1)
PHRM- 628	Pharmacognosy– IIA (Advanced)	3(3-0)
PHRM- 628 P	Pharmacognosy– IIA (Advanced)Lab	1(0-1)
PHRM – 629	Pathology	3(3-0)
PHRM – 629 P	Pathology	1(1-0)

## Semester 7

Course Code	Course Title	Credit Hour
PHRM – 634	Pharmacy Practice- IVA (Hospital Pharmacy- I)	03(3-0)
PHRM – 635	Pharmacy Practice- VA (Clinical Pharmacy- I)	3(3-0)
PHRM – 635 P	Pharmacy Practice- VA (Clinical Pharmacy- I) Lab	1(0-1)
PHRM – 636	Pharmaceutics- IVA (Industrial Pharmacy- I)	3(3-0)
PHRM – 636 P	Pharmaceutics- IVA (Industrial Pharmacy- I) Lab	1(0-1)
PHRM- 637	Pharmaceutics– VA (Bio-Pharmaceutics– I)	3(3-0)
PHRM- 637 P	Pharmaceutics– VA (Bio-Pharmaceutics– I) Lab	1(0-1)
PHRM – 638	Pharmaceutics– VIA (Pharmaceutical Quality Management– I)	3(3-0)
PHRM – 638 P	Pharmaceutics– VIA (Pharmaceutical Quality Management– I) Lab	1(0-1)

## Semester 9

Course Code	Course Title	Credit Hour
PHRM – 644	Pharmaceutics-VIIA (Pharmaceutical Technology)	3(3-0)
PHRM – 644 P	Pharmaceutics-VIIA (Pharmaceutical Technology)Lab	1(0-1)
PHRM – 645	Pharmacy Practice-VIA (Advanced Clinical Pharmacy-II)	3(3-0)
PHRM – 645 P	Pharmacy Practice-VIA (Advanced Clinical PharmacyII) Lab	1(0-1)
PHRM – 646	Pharmacy Practice-VIIA (Forensic Pharmacy)	3(3-0)
PHRM- 647	Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing)	3(3-0)
PHRM – 648	Pharmaceutical ChemistryIVA (Medicinal Chemistry)	3(3-0)
PHRM – 648 P	Pharmaceutical ChemistryIVA (Medicinal Chemistry)Lab	1(0-1)

## Semester 6

Course Code	Course Title	Credit Hour
PHRM – 630	Pharmacy Practice– IIB (Community, Social & Administrative Pharmacy)	03(3-0)
PHRM – 631	Pharmaceutical Chemistry– IIIB (Pharmaceutical Analysis)	3(3-0)
PHRM – 631 P	Pharmaceutical Chemistry– IIIB (Pharmaceutical Analysis) Lab	1(0-1)
PHRM– 632	Pharmacology & Therapeutics– IIB	3(3-0)
PHRM – 632 P	Pharmacology & Therapeutics– IIB Lab	1(0-1)
PHRM- 633	Pharmacognosy– IIB (Advanced)	3(3-0)
PHRM- 633 P	Pharmacognosy– IIB (Advanced) Lab	1(0-1)
PHRM – 616	Pharmacy Practice– III (Computer & its Applications in Pharmacy)	3(3-0)
PHRM – 616 P	Pharmacy Practice– III (Computer & its Applications in Pharmacy)Lab	1(0-1)

## Semester 8

Course Code	Course Title	Credit Hour
PHRM – 639	Pharmacy Practice– IVB (Hospital Pharmacy– II)	03(3-0)
PHRM– 640	Pharmacy Practice– VB (Clinical Pharmacy– I)	3(3-0)
PHRM – 640 P	Pharmacy Practice– VB (Clinical Pharmacy– I) Lab	1(0-1)
PHRM – 641	Pharmaceutics– IVB (Industrial Pharmacy– II)	3(3-0)
PHRM– 641 P	Pharmaceutics– IVB (Industrial Pharmacy– II) Lab	1(0-1)
PHRM- 642	Pharmaceutics– VB (Bio-Pharmaceutics– II)	3(3-0)
PHRM- 642 P	Pharmaceutics– VB (Bio-Pharmaceutics– II) Lab	1(0-1)
PHRM– 643	Pharmaceutics– VIB (Pharmaceutical Quality Management– II)	3(3-0)
PHRM – 643 P	Pharmaceutics– VIB (Pharmaceutical Quality Management– II) Lab	1(0-1)

## Semester 10

Course Code	Course Title	Credit Hour
PHRM – 649	Pharmaceutics-VIIB (Pharmaceutical Technology)	3(3-0)
PHRM – 649 P	Pharmaceutics-VIIB (Pharmaceutical Technology) Lab	1(0-1)
PHRM – 650	Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II)	3(3-0)
PHRM – 650 P	Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II) Lab	1(0-1)
PHRM – 651	Pharmacy Practice-VIIB (Forensic Pharmacy)	3(3-0)
PHRM- 652	Pharmacy Practice-VIIIB (Pharmaceutical Management & Marketing)	3(3-0)
PHRM – 653	Pharmaceutical Chemistry-IVB (Medicinal Chemistry)	3(3-0)
PHRM – 653 P	Pharmaceutical Chemistry-IVB (Medicinal Chemistry) Lab	1(0-1)
<b>Total Credit Hours</b>		<b>198</b>



## M.PHIL. Pharmacy (Pharmaceutics)

### Teaching Faculty

Prof. Dr. Sherjeel Adnan (Head/Dean)  
 Dr. Asad Hamad (Associate Professor)  
 Dr. Anjum Khursheed (Assistant Professor)  
 Ms. Gull e Fatima (Lecturer)  
 Mr. Ahsan Arif (Demonstrator)  
 Ms. Rukhsar Nasir (Demonstrator)

### Career Prospects

- Pharmaceutical Industry
- Regulatory Affairs
- Forensic pharmacist
- DRAP
- Drug Inspectors
- Academia and Research and Development organizations
- Hospital and Clinical Pharmacy
- Pharmaceutical Sales and Marketing
- Entrepreneurship and Public Health
- Biotechnology Firms
- Contract Research Organizations (CROs)

### Program Summary

Admission Fall  
 Duration 2 Years  
 Semesters 10  
 Total Credit Hours 30

## SCHEME OF STUDIES

### Semester 1

### Semester 2

Course Code	Course Title	Credit Hour
MPCU-701	Advanced Pharmaceutics	3(3-0)
MPCU-702	Pharmaceutical Biotechnology and Microbiology	3(3-0)
MPCU-703	Nutraceuticals and Cosmetology	3(3-0)
MPCU-704	Pharmaceutical Biostatistics	3(3-0)

Course Code	Course Title	Credit Hour
MPCU-705	Formulation Design and Product Development	3(3-0)
MPCU-706	Applied Biopharmaceutics and Pharmacokinetics	3(3-0)
MPCU-707	Pharmaceutical Quality Assurance and Instrumentation	3(3-0)
MPCU-708	Research Methodology and Scientific Writing	3(3-0)

### Semester 3&4

Course Code	Course Title	Credit Hours
MPCU-709	Research and Thesis	06
<b>Total creditHours</b>		<b>30</b>

## M.PHIL. Pharmacy (Pharmaceutical Chemistry)

### Teaching Faculty

Prof. Dr. Sherjeel Adnan (Head/Dean)  
 Dr. Asad Hamad (Associate Professor)  
 Dr. Anjum Khursheed (Assistant Professor)  
 Ms. Gull e Fatima (Lecturer)  
 Mr. Ahsan Arif (Demonstrator)  
 Ms. Rukhsar Nasir (Demonstrator)

### Career Prospects

- Pharmaceutical Industry
- Regulatory Affairs
- Forensic pharmacist
- DRAP
- Drug Inspectors
- Academia and Research and Development organizations
- Hospital and Clinical Pharmacy
- Pharmaceutical Sales and Marketing
- Entrepreneurship and Public Health
- Biotechnology Firms
- Contract Research Organizations (CROs)

### Program Summary

Admission Fall  
 Duration 2 Years  
 Semesters 10  
 Total Credit Hours 30

## SCHEME OF STUDIES

### Semester 1

### Semester 2

Course Code	Course Title	Credit Hour
MPCH-701	Analytical Chemistry	3(3-0)
MPCH-702	Drug Discovery and Design	3(3-0)
MPCH-703	Chemistry of Natural Product and Phytochemistry	3(3-0)
MPCH-704	Pharmaceutical Biostatistics	3(3-0)

Course Code	Course Title	Credit Hour
MPCH705	Drug Stability and Chemical Kinetics	3(3-0)
MPCH706	Isolation and Characterization of Drugs	3(3-0)
MPCH707	Bioinformatics and Combinatorial Chemistry	3(3-0)
MPCH708	Research Methodology and Scientific Writing	3(3-0)

### Semester 3&4

Course Code	Course Title	Credit Hour
MPCH709	Research and Thesis	06
<b>Total Credit Hours</b>		<b>30</b>

## FACULTY OF LAW

### Message From The Dean

Welcome to the Law Department at Grand Asian University Sialkot, where academic rigor meets practical legal training. We are committed to nurturing future legal professionals through innovative teaching methods, hands-on experiences and a focus on real-world application. Our esteemed faculty, comprising seasoned legal experts, cultivates a dynamic and collaborative learning environment that fosters intellectual growth and skill development.

At the core of our approach is the conviction that practical education is essential. As a department, we are at the forefront of cutting-edge research, tackling contemporary legal challenges and actively contributing to the advancement of the legal profession.

Our curriculum is carefully designed to align with industry demands, producing graduates who are not only knowledgeable but also skilled practitioners. We invite you to join us on a transformative journey of intellectual exploration, practical education and collective commitment to shaping the future of law.

Thank you for choosing the Grand Asian University Sialkot Law Department.

Welcome to Grand Asian University, where your future begins.



**Dr. Usman Anwar**  
Dean Faculty of Law

## FACULTY OF LAW



### **Mission**

Department of Law is dedicated to provide contemporary legal education to make young generation proficient legal professionals and skillful personnel for the community. We as a community are committed to place great value on Knowledge, Excellence and Honor and transform the law students into the impeccable professional acumen.

### **Objectives**

The objectives of this faculty are to

- produce legal experts and professionals who will be able to succeed in their careers.
- provide students a wide range of opportunities to gain Law expertise in conjunction with academic excellence, collaborative research, leadership and strategic planning.

## Programs Being Offered

Bechelor in Law (LLB)

Master in Law (LLM)

## Message From HOD



The Department of Law welcomes the new students at Grand Asian University, Sialkot. This department is dedicated to nurturing a new generation of legal professionals equipped to meet the challenges of a rapidly evolving world. Our innovative teaching methods, combined with hands-on experiences, ensure that students not only gain a deep understanding of legal principles but also develop the skills necessary to apply this knowledge effectively in real-world scenarios.

Our distinguished faculty, composed of seasoned legal practitioners and scholars, fosters a dynamic and collaborative learning environment. They bring their expertise and insights to the classroom, inspiring students to think critically, engage in rigorous debates and approach legal challenges creatively. At the heart of our mission is the belief that legal education must transcend theoretical learning, equipping students with the tools to excel in

practice and positively impact society.

Our curriculum is meticulously designed to align with the needs of the legal profession, ensuring that graduates are well-prepared to excel as competent practitioners, ethical leaders and advocates for justice.

We invite you to embark on this transformative journey of intellectual discovery, practical education, and a shared commitment to shaping the future of law. As you become a part of our vibrant community, we encourage you to embrace challenges, seize opportunities and contribute to the noble cause of justice with dedication and integrity.

Thank you for choosing the Law Department at Grand Asian University, Sialkot. Together, let us pave the way for a brighter and more equitable future.

**Mian Sheraz Ahmad**  
PhD Law

# Bachelor of Law (LLB)

**Teaching Faculty**  
**Dr. Usman Anwar (Dean)**  
**Dr. Mian Muhammad Sheraz**  
**(Assistant Professor)**  
**Mr. Muhammad Raza Toor**  
**(Assistant Professor)**  
**Mr. Shakeel Akhtar Thakur**  
**(Assistant Professor)**  
**Ms. Aisha Warraich**  
**(Lecturer)**

## Career Prospects

- Advocate
- Attorney
- Corporate lawyer
- Mediation
- Human Resources
- Immigration lawyer
- Journalism
- Legal consultant
- Paralegal
- Police officer

## Program Summary

Admission            Fall  
 Duration            5 Years  
 Semesters            10  
 Total Credit Hours    166

## SCHEME OF STUDIES

### Semester 1

CourseCode	Course Title	CreditHour
BC-111	EnglishI	3(3-0)
BC-112	Pakistan Studies	2(2-0)
BC-113	Introduction to Sociology	3(3-0)
BC-114	Introduction to Economics	3(3-0)
LC-115	Introduction to Law	3(3-0)
BC-116	Computer Skills Development	3(3-0)

### Semester 2

CourseCode	Course Title	CreditHour
BC-121	EnglishII	3(3-0)
BC-122	Islamic Studies	2(2-0)
BC-123	Introduction to Political Science	3(3-0)
LC-124	Introduction to Legal System of Pakistan	3(3-0)
BC-125	History of South Asia	3(3-0)
LC-126	Law of TortsI	3(3-0)

### Semester 3

Course Code	Course Title	Credit Hour
BC-211	English-III	3(3-0)
BC-212	Introduction to logic and reasoning	3(3-0)
LC-213	Islamic JurisprudenceI	3(3-0)
LC-214	Law of TortsII	3(3-0)
LC-215	Law of ContractI	3(3-0)
LC-216	Constitutional LawI (UK)	3(3-0)

### Semester 4

Course Code	Course Title	Credit Hour
LC-221	Human Rights Law	3(3-0)
LC-222	Constitutional Law -II (US)	3(3-0)
LC-223	Law of Contract-II	3(3-0)
LC-224	Islamic Jurisprudence -II	3(3-0)
BC-225	Introduction to Psychology	3(3-0)

### Semester 5

Course Code	Course Title	Credit Hour
LC-311	English Jurisprudence -I	3(3-0)
LC-312	Constitutional Developments in Pakistan	3(3-0)
LC-313	Islamic Personal Law -I	3(3-0)
LC-314	Criminal Law-I	3(3-0)
LC-315	Law of Property	3(3-0)

### Semester 6

Course Code	Course Title	Credit Hour
LC-321	English JurisprudenceII	3(3-0)
LC-322	Law of Business Organizations	3(3-0)
LC-323	Islamic Personal LawII	3(3-0)
LC-324	Criminal Law-II	3(3-0)
LC-325	Land Laws	3(3-0)



## Semester 7

CourseCode	Course Title	CreditHour
LC-411	Public International law	3(3-0)
LC-412	Constitutional Law (Pakistan)	3(3-0)
LC-413	Civil Procedure Code	3(3-0)
LC-414	Criminal Procedure Code	3(3-0)
LC-415	Law of Evidence	3(3-0)
LC-416	Legal Drafting	3(3-0)

## Semester 9

Course Code	Course Title	Credit Hour
BC-511	Research Methods	3(3-0)
BC-512	Moot cases and Professional Ethics	3(3-0)
LC-513	Minor Acts	3(3-0)
Group of ELECTIVE-I courses		
LE-514	Alternate Dispute Resolution (ADR)	3(3-0)
LE-515	Consumer Protection Laws	3(3-0)
LE-516	Intellectual Property Laws	3(3-0)
Group of ELECTIVE-II courses		
LE-517	International Humanitarian Laws	3(3-0)
LE-518	Islamic Commercial Laws	3(3-0)
LE-519	Labour Laws	3(3-0)

## Semester 8

CourseCode	Course Title	CreditHour
LC-421	Public International Law	3(3-0)
LC-422	Equity and Specific Relief	3(3-0)
LC-423	Civil Procedure Code	3(3-0)
LC-424	Criminal Procedure Code	3(3-0)
LC-425	Law of Evidence	3(3-0)
LC-426	Legal Drafting	3(3-0)
Internship	After completion of 8 <sup>th</sup> semester and before 10 semesters (during summer vacation)	3(3-0)

## Semester 10

CourseCode	Course Title	CreditHour
LC-521	Administrative Law	3(3-0)
LC-522	Interpretation of Statutes and Legislative Writing	3(3-0)
LC-523	Final Research Assignment	3(3-0)
Group of ELECTIVE-III courses		
LE-524	Islamic Legal Maxims	3(3-0)
LE-525	Public Interest Laws	3(3-0)
LE-526	Media laws	3(3-0)
Group of ELECTIVE-IV courses		
LE-527	Cyber laws	3(3-0)
LE-528	Environmental Laws	3(3-0)
LE-529	Clinical Legal Education	3(3-0)
Note: in the last two semesters (9 <sup>th</sup> and 10 <sup>th</sup> ) students can opt four (4) courses (two courses in each semester) of their choice from the list of elective courses (group given in the scheme of study-IV) offered by the department of law, faculty of law GAUS, such shall subject to the approval of HOD. (See, note 1 & 2 in the framework of elective courses).		
Total Credit Hours=166		



## Master of Law (LLM)

**Teaching Faculty**  
**Dr. Usman Hanif (Dean)**  
**Dr. Mian Muhammad Sheraz**  
**(Assistant Professor)**  
**Mr. Muhammad Raza Toor**  
**(Assistant Professor)**

**Program Summary**

Admission            Fall  
 Duration             2 Years  
 Semesters            4  
 Total Credit Hours   30

**Career Prospects**

- Advocate
- Attorney
- Corporate lawyer
- Immigration lawyer
- Legal consultant
- Paralegal
- Police Officer

### SCHEME OF STUDIES

	Course Code	Course Title	Credit Hours
1 <sup>st</sup> Semester one compulsory+ Three General/ Optional Law Courses	MCC-611	Research Methodology	3(3-0)
	MLG-611	Comparative Constitutional Law	3(3-0)
	MLG-612	Legal history of Pakistan and India	3(3-0)
	MLO-610	Islamic Laws	3(3-0)
	MLO-611	Criminology	3(3-0)
	2 <sup>nd</sup> Semester Four General / Optional Law Courses	MLG-621	Administrative Law
MLG-622		Human Rights and Humanitarian Law	3(3-0)
MLO-621		Comparative study of Islamic and Western Jurisprudence	3(3-0)
MLO-622		Environmental Law	3(3-0)
MLO-623		Intellectual Property Law	3(3-0)
	MLO-624	Western Jurisprudence and Legal Theory	3(3-0)
3 <sup>rd</sup> & 4 <sup>th</sup> Semesters	MLR-711	Research and Thesis (Compulsory)	6(0-6)



# UNIVERSITY ADMINISTRATION

## REGISTRAR OFFICE

The Registrar's Office is a vital department in a university which serves as the central hub for academic records, registration, and student information.

The Registrar's Office is responsible for maintaining the coherence among all the departments of the University and integrity of academic records, ensuring compliance with academic policies, and providing exceptional service to students, faculty and staff. Being the custodian of the common seal and academic records of the University, this office is responsible for the safe custody of University Ordinance, Statutes and academic rules/regulations and ensuring their strict implementation. As an Administrative Head of the Secretariat of the University, this office is responsible for the provision of secretarial support to the Board and Vice Chancellor and act as Secretary Board of Governors, Executive Committee, Deans Committee, Academic Council, Board of Advanced Studies and Research, Selection Board Committee of the University. On behalf of the university, this office carries out the liaison and coordination with HEC and accreditation councils on requirement basis.



**Dr. Saqib Anwar Siddiqui**  
Registrar, GAUS

## CONTROLLER OF EXAMINATIONS

The Examination Branch is a vital part of the university and is associated with the different activities that range from secrecy, conduct, evaluation, compilation, normalization and announcement of results to the issuance of certificates and degrees and the verification of credentials. The entire work of the Examinations Branch is conducted as per the Act, Statutes, Rules and Regulations made therein by the authorities of the university. The Controller of Examinations is the custodian of the examination records of the students and provides creditable support to the faculty and students in line with best practices countrywide.

The Examinations Branch office, being responsible for maintaining the examination records, takes on the responsibility of providing quality service to the students and faculty in all spheres of examination matters. Along with the other essential functions, it assumes transparency, integrity, secrecy, and quality service as its core values. The main functions include the preparation of date sheets, conducting the examinations, compilation and declaration of results, preparation of transcripts and degrees, as well as arranging the convocations. In order to promptly extend overwhelming services, the Examinations Branch has a vibrant team who are dedicated professionals augmented with the best service skills.



**Mr Mehmood Akhter**  
Controller Examination, GAUS

## TREASURER OFFICE

The Treasurer's Office at Grand Asian University plays a critical role in managing the financial health and resources of the institution. As a key administrative department, it ensures that the university's finances are efficiently managed, transparent, and aligned with the university's strategic goals. The office oversees a wide range of financial services, including tuition payment processing, budget management, payroll, and financial planning. It serves students, staff, faculty, and external stakeholders by handling all matters related to university finances.

The Treasurer's Office of Grand Asian University plays a crucial role in supporting the institution's academic mission by ensuring that all the financial resources are managed responsibly and aligned with the university's goals. Whether assisting students with tuition payments or guiding departments in financial planning, the office is committed to providing exceptional service and maintaining the university's financial stability.



**Mr Muhammad Hayat Khan**  
Treasurer, GAUS



## OFFICE OF RESEARCH, INNOVATION AND COMMERCIALIZATION (ORIC)

The purpose of ORIC is to serve and display as a fundamental platform to cover all the research activities, develop, expand, enhance and manage the university's research programs and link research activities directly to the educational, social and economic priorities of the university and its broader community. The ORIC is also responsible for assuring that the quality of research reflects the highest international standards and competitiveness.

GAUS established the Office of Research, Innovation, and Commercialization (ORIC) under the patronage of the Higher Education Commission (HEC). The objective of the establishment (ORIC) is allied with HEC to develop, improve and manage the University's research programs and to link research activities directly to the educational, social and economic priorities through contributing in knowledge economy of the University and the broader community. The ORIC is also responsible for ensuring that the quality of research reflecting the highest international standards and advances the reputation of the university among the top research institutions in the world and revealing the principal values of academic freedom, professional integrity, and ethical conduct and full compliance with all policies, legal requirements and operational standards of the university.

Along with other prime research activities, ORIC in GAUS also acknowledges its responsibilities to establish pathways between academia and industries. In this industrial hub and a Golden Triangle area, this directorate is playing all out efforts to nurture the industrial linkages and to contribute in developing the research based working patterns and knowledge economy in this area. Although we already have collaborative research works with different universities in Germany, Denmark, Turkey, UK, and China. However, we are looking forward to establishing more scientific ties with a number of universities abroad as well as national level.



**Dr. Shehbaz Ali**  
PhD and Postdoc  
Director ORIC, GAUS

## DIRECTORATE OF ACADEMICS

The Office of the Directorate of Academics has been established to facilitate and render services to our students who are the future leaders. This office is responsible to develop and maintain academic policies, processes and procedures to ensure that all the educational programs in GAUS could deliver and match with the implied needs of all stakeholders especially the students.

This office also involves in developing and maintaining a suite of academic products that are competitive in the market to ensure appropriate outcomes for students, including the use of digital tools for both delivery and support. It also oversees all aspects of academic reporting including performance of students studying at GAUS, the outcomes and other student related activities including migration issues, ensuring that HEC rules, regulations and key performance indicators are met.

Being the Director of Academics, I very warmly welcome my all the new students and feel very pleasure to render the services of Directorate of Academics to solve any issue of our students.



**Prof. Dr. Iqbal Butt**  
Director Academics, GAUS

## QUALITY ENHANCEMENT CELL (QEC)

Quality Enhancement Cell at Grand Asian University Sialkot, strives to create a culture of quality and accountability, ensuring that the university's graduates are equipped with the knowledge and skills to succeed in a rapidly changing world. We are dedicated to foster a culture of excellence in every aspect of our academic and administrative operations. The QEC plays a pivotal role in this mission by continuously enhancing the quality of our educational offerings and support services. The ultimate goal of QEC is to strive hard to knit the vibrant culture of education excellence through developing and displaying the excellence in curriculums, faculty development to furnish with advanced educational tools, student-centered feedback, attaining the accreditation and standards, research and innovation and to match with the implied needs of industries.

QEC upholds the highest standards of quality through rigorous self-assessment and compliance with national and international accreditation requirements. This department with collaborative efforts, encourage students, faculty and staff to engage with our quality assurance processes. As we strive towards our goal of becoming a leading institution renowned for academic excellence, QEC will continue to implement best practices and innovative strategies. Together, we can create an enriching and dynamic educational environment in our university.



**Mr Abdul Jawad Butt**  
Acting Director QEC

## DIRECTORATE OF STUDENT AFFAIRS

The Directorate of Student Affairs provide actively to coordinate the various aspects of student life and development by generating a liaison between students, faculty and university administration. The primary function of Student Affairs Office is to assistance to students in any way possible. It leads, directs, and administers overall functions of Student Service Center, Alumni Relationship, Student Counseling, Job Placement, Student Societies, Clubs, Events and overall discipline.

In University the important function of Student Affairs Office is to enhance the quality of student life both in and outside of the classroom. The Directorate of Student Affairs is a central place for students where they can express and get help about any problem they encounter on campus whether it is academic, personal or emotional. Efforts are made to ensure a student life, free from worries and distractions, to help them learn to manage their affairs on their own and to cope with strains and stresses which are part of the growth processes.

The student Affairs Office provides proactive support and capacity building services to promote co-curricular activities in the University which could enrich our graduates at every stage of their life as well as they could build strong relationships with their peers, faculty, administration and other stakeholders. The knowledgeable friendly student intern staff is cross-trained in all areas to provide student services and get you on your way. The main function of the SSC is to provide student centered customer friendly services as orientation of new students, students enrollment and registration, issuance of student ID cards and New Email Ids, intimation of course registration, timetable and exam dates, handling queries and helping students in their academic problems, career Counseling, Internships and Job Placements and Scholarships/fee concession and registration of students for Co-curricular activities.



**Dr. Ayaz Qaiser**  
Director Student Affairs, GAUS



## DIRECTORATE OF ADMISSIONS

The Directorate of Admission at Grand Asian University serves as the gateway for prospective students looking to join a world-class academic institution committed to excellence in education, research, and innovation. The directorate plays a pivotal role in facilitating the admission process, ensuring that students from diverse backgrounds have the opportunity to become part of a vibrant learning community. The mission of this directorate is to recruit, enroll, and support a diverse and talented student body that will thrive academically and contribute to the university community. With a commitment to inclusivity and access, the department strives to make the admission process smooth and equitable for all applicants.

The key functions comprising of guiding and imparting personalized attention to students, throughout the entire admission process, helping them in the choosing the best program, eligibility criteria, application processing, entrance exams and interviews, course offerings, scholarship opportunities and financial aid, campus tours and open house discussion. Also, this Department helps to maintain a connection with the university's alumni network, providing prospective students with valuable insights into career opportunities and life after graduation. So, cumulatively the admission department in Grand Asian University is dedicated to assisting students in every aspect of their journey to becoming successful members of the university's academic community and thereafter the most functional entities for society.



**Ms Rabia Tahir**  
Deputy Director Admissions, GAUS

## DIRECTORATE OF HUMAN RESOURCE

The Directorate of Human Resource at Grand Asian University, Sialkot. As a team is committed to foster a supportive and inclusive environment for our employees. As a Human Resource Department we have created a positive diversified cultural environment where values are obliged. The diversified culture also raises more positive voices which build our workforce structure stronger and deeper in terms of learning and gaining knowledge. We practice equal employment opportunities for the all qualified individuals, regardless of race, gender, ethnicity, age, disability and cultural differences. Our recruitment process is based on equal opportunity parameters which attracts people from diverse culture. The merit is one of our core values and we welcome people who bring best to the mutual growth of the team and also offer benefits to those who are working with us.

Our mission is to develop and retain the talented and diverse workforce which contributes to the academic and institutional excellence of the university. At Grand Asian University Sialkot, we believe that our people are our main asset, and this department is dedicated to create such a working environment which promotes innovation, teamwork, collaboration and strong sense of learning. This Department is overseeing the recruitment process, employee's relations, employee compensation & benefits, payroll management, employee training and workshops and employees development programs.

Our employees have direct access towards the medical facilities where they have quality treatment and medication for themselves and their families. We not only care our employees but also their families because for us their families are also a part of the institution.



**Ms Rabia Bibi**  
Director HR, GAUS



## IT SERVICES

The IT Services Department at Grand Asian University plays a pivotal role in supporting the technological needs of students, faculty, and staff. It ensures the smooth functioning of the university's IT infrastructure, providing essential services that enhance academic, administrative and research activities. The department's core responsibility is to deliver reliable, efficient and secure technology solutions across the campus, fostering an environment where technology seamlessly integrates with the university's academic mission.

IT Services manage a wide range of tasks, from maintaining the campus-wide network and providing Wi-Fi access, to overseeing data security, software management and hardware maintenance. The department also ensures the availability of key academic resources such as learning management systems (LMS), cloud storage and online collaboration tools. By maintaining up-to-date and secure systems, IT Services guarantees that students and faculty can access essential academic resources from anywhere, anytime.

IT Services places a high priority on cyber security, protecting sensitive data and ensuring that all systems are secure from potential cyber threats. It continually evaluates and upgrades its security protocols to meet the latest standards.

Through its commitment to excellence, innovation, and service, IT Services ensures that Grand Asian University remains a leader in technology-driven education, supporting both the present needs of the community and the future ambitions of the institution. By keeping the university connected and its systems secure, IT Services is integral to the success of Grand Asian University's mission.



**Mr Abdul Samad Hashmi**  
IT Manager, GAUS

## MEDIA & WEB DEVELOPMENT TEAM

The Media & Web Development Team at GAUS is dedicated to creating and managing the university's digital platforms and media presence, ensuring they are innovative, user-friendly and aligned with the institution's goals for engagement and excellence. This team is responsible for delivering a seamless online and media experience for students, faculty, staff and visitors by developing and maintaining websites, web-based applications, and multimedia communication tools that enhance the university's academic, administrative and outreach functions.

In addition to managing websites, the Media & Web Development Team designs custom websites and digital media solutions to support various academic and administrative needs. These include student portals, faculty dashboards, online enrollment systems and dynamic media content, streamlining processes and enriching the user experience. The team collaborates closely with other departments to identify their digital and media needs and transform them into impactful solutions.

A strong focus on security ensures that all platforms comply with the latest cyber security standards. Regular monitoring, updates and the implementation of cutting-edge security measures safeguard sensitive information and maintain trust.

The Media & Web Development Team is instrumental in shaping the digital and media identity of GAUS. By delivering innovative, secure and reliable solutions, the team empowers the university to thrive in a modern, technology-driven academic landscape, promoting connectivity, creativity and growth in the digital and media spheres.



**Mr Rabi Ul Hasnat Ahmed**  
Chief Designer, GAUS



**Mr Waqar Azeem Khan**  
Web Developer



# ADMISSION INFORMATION



# ADMISSION POLICY

## 1. CONFIRMATION OF ADMISSION

- Selected candidates are required to confirm their **acceptance of admission** by depositing the **prescribed fee** and submitting complete **set of documents**
- The admission in the University will be **provisional subject** to the verification of the **Certificate/Degrees of the students**
- Submission of **incorrect/ false forged/ fabricated fraudulent document(s) or information is a criminal offence** and in either of such cases, the University reserves the right to **initiate legal proceedings** in addition to **cancellation of admission** from retrospective effect at any stage without any **prior notice**.

## 2. INTER PROGRAM TRANSFER

A student registered in a program after paying dues, may be transferred to another program in the University subject to the condition that she has applied in the program of second choice and falls on merit (if applicable) with the permission of the concerned Dean/HOD and Registrar or nominee within fifteen (15) days of commencement of classes. Afterwards, no permission for inter program transfer will be accepted in any case. In the case of program transfer, the fee of new program will be charged /adjusted accordingly.

## 3. SEMESTER FREEZE

The freezing in first two semesters shall not be allowed. The detailed Regulation for freezing of semester's may be perused in the Rules and Regulations for Examinations

## 4. MIGRATION/TRANSFER OF CREDITS

### A. Migration from other Institutions to GAUS:

The Vice Chancellor, on the recommendations of the Head of Department/Dean of Faculty through the Registrar may allow migration/transfer of credits of a regular student earned from HEC recognized Institutions and accredited by the concerned accreditation bodies, to this University, subject to fulfillment of following conditions/submittal of following documents:

- a) The applicant concerned should fulfill minimum entrant criteria of the program of this University. No migration will be allowed in first and final year classes.
- b) The applicant will come in office along with required documents and will complete, and submit application on prescribed form obtained from the Registrar Office providing genuine and plausible reasons for migration through his parent Institution to the Registrar in all respects will be referred to the Head of Department/Dean of Faculty concerned who shall securitize the same and determine (i) whether the applicant fulfills the entrant criteria

## ADMISSION POLICY

- (ii) Semester in which he/she will be allowed migration (iii) Deficiency course(s) to be studied by the applicant during his/her stay in this University, if allowed or declare course(s) as exempted, so that his/her studies at parent Institution could be declared at par with the students of this University. Such recommendations shall be submitted by the HOD concerned to the BOF for endorsement and onward consideration of the Registrar.
- c) The request of applicant who has been dropped out, rusticated, expelled, or whose entry in the parent Institute was banned for the reasons whatsoever at any time during his/her academic career, SHALL NOT BE CONSIDERED
- d) The applicant should therefore, be required to submit a “No Objection Certificate” in this context that:
- He has secured not less than 2.5 GPA or equivalent in the examination based on which migration is being requested.
  - He has neither been debarred from taking the University/Institution examinations nor suspended, expelled/rusticated for whatsoever reason, from the university or institution from where he intends to migrate.
  - No disciplinary action is pending against him at his parent University/Institution.
- e) Admission by migration will not be allowed ordinarily after the expiry of four weeks from the commencement of the semester classes.
- f) Migration fee, as prescribed by the University per semester to be studied, will be charged.
- g) Credits hours will be transferred on course to course basis ie. A person taking course A at University X is allowed to transfer his/her credits to GAUS provided that course A is equivalent to course taught at the GAUS.
- h) Courses with credit hours and course contents equivalent to the degree program at this University, shall be considered for transfer.
- i) Exempted courses along with their credit hours shall be depicted on the final/official transcripts but their grades obtained from the parent Institution will not be displayed and will not be considered for CGPA calculation. Such subjects will be marked as “Transferred Credits” (TC)
- j) The applicant should have to complete minimum 50% of the courses from the Grand Asian University, Sialkot. No credit hours of a course will be transferred if the grade is 'C' or less for undergraduate and 'B' or less for graduate/postgraduate programs.



## ADMISSION POLICY

### B. Migration from GAUS to other Institutions:

a) A student desiring to leave this University and to join another university or institution shall apply to the Dean of the Faculty concerned on the prescribed form.

b) The student shall be required to clear all the university dues before he applies for migration.

c) In case of a student who has been debarred from taking the University examination or has been expelled or rusticated for whatsoever reason, No Objection Certificate (NOC) shall not be issued so far as the punishment is in force.

d) The Registrar shall issue NOC which shall be valid for 60 days only.

e) A student who has obtained NOC from this University, but has not secured admission in another institution may be re-admitted to the GAUS in the class to which he can be admitted under the regulations provided that:

I. His absence from the current teaching session of that class does not exceed four (4) weeks.

ii. He surrenders the NOC.

Any change/ addition/modification, if made in these regulations will also be applicable.

The Worthy Vice Chancellor has the powers to regret any request for migration after recording proper reason(s) or relax any of the above condition(s) to be determined on case to case basis, if situation warrants.



## ENTRY REQUIREMENTS

### Programs in Biosciences

#### **Undergraduate Programs (ADP/BS)**

At least 2nd division (50% marks) in FSc Pre-Medical and Pre-Engineering or equivalent (12 years of education) or Equivalent HSSC Certificate from IBBC Islamabad with at least 50% marks.

#### **Graduate Programs (MS)**

16 years of Education or 4 years of BS in Biochemistry, Microbiology, Biotechnology or Pharmacology for MSc/MS Programs in relevant field with at least 2nd Division with 50% marks in annual system and/or 2.5/4.00 CGPA (semester system) from HEC recognized University.

Qualifying GAUS entry test (securing minimum 50% marks) and interview is mandatory or valid scores (above cumulative 50%) in GAT-GENEAL test conducted by the University authorized/approved testing and evaluation agencies is also acceptable for the admission in MSc/MS programs.

### Programs in Food Nutrition and Agricultural Sciences

#### **Undergraduate Programs (ADP/BS)**

FSC Pre Medical, Pre-Engineering, DAE Food Science or Equivalent HSSC Certificate from IBBC Islamabad with at least 50% marks.

#### **Graduate Programs (MS/PhD)**

- Students seeking admission to MS in Human Nutrition & Dietetics must possess minimum CGPA 2.0 out of 4.0 or 50% in annual system in BSc (Hons.) Human Nutrition and Dietetics, BSc (Hons.) Human Nutrition, BS (Hons) Nutrition and Dietetics, BSc (Hons) Food Sciences and Human Nutrition, Doctor of Nutrition and Dietetics, BS/ BSc (Hons) Home Economics (Food and Nutrition) and BSc (Hons.) Nutrition.

- NTS test / GAT-GENERAL/ University Test/ subject test (minimum 60% marks)

- Student seeking admission in PhD Human Nutrition and Dietetics must possess the following entry requirements.

- M.Sc.(Hons.)/M.S. Human Nutrition and Dietetics, M.Sc. (Hons.) Nutrition, M.Sc.(Hons.) Food Science and Nutrition/ M. Phil Food and Nutrition, M.Sc. (Hons.) Home Economics (Food and Nutrition), M.Sc. (Hons.) Food Science and Technology/ Food Technology (18-year education) from any HEC Recognized University with minimum 3:0/ 4:0 CGPA in semester system and/or first division in annual system OR equivalent 18 years of education/ degree in relevant field (Biological and Medical Sciences)

- At least 70 % scores are required in the University entrance test for PhD program

## ENTRY REQUIREMENTS

### Programs in Business Administration and Accounting and Finance

#### Undergraduate Programs (ADP/BS)

FSc/ICS/ I.Com/FA or an Equivalent HSSC Certificate from IBBC Islamabad with at least 45%

### Programs in Computer Science and Information Technology

#### Undergraduate Programs (ADP/BS)

Minimum 50% marks in Intermediate/12 years schooling/A- Level (HSSC) or Equivalent are required for admission in all BS Computing Programs other than BS Computing Engineering excluding sports and Hafiz-e-Quran marks.

### Programs in Social Sciences

#### Undergraduate Program (ADP)

FSc/ICS/ I.Com/FA or Equivalent HSSC Certificate from IBBC Islamabad with at least 33%

### Programs in Pharmacy

#### Undergraduate Program (Pharm D)

Minimum 60% marks in FSc /12 years schooling/A- Level (HSSC) or Equivalent

\*An equivalency certificate by IBCC will be required in case of education from some other country or system.

Students who have not studied Mathematics at the intermediate level have to pass deficiency courses of Mathematics (06 credits) in the first two semesters.

#### Graduate Programs (MS)

Degree in the relevant subject, earned from a recognized university after 16 years of education with at least 60 % marks or CGPA of at least 2.0 on a scale of 4.0.

## ENTRY REQUIREMENTS

### Programs in Law

#### **Undergraduate Program (LLB)**

At least 2nd Div. (50% marks) in FA/FSc or equivalent (12 years of education) with Law Aptitude Test (LAT), qualified with minimum score of 50% and has maximum of three chances to pass the test.

#### **Graduate Program (LLM)**

Students seeking admission in LLM need to clear LLB with at least 2nd Division or 50% marks in annual system and/or 2.5/4.00 CGPA (semester system) from HEC recognized University.

### Programs in Engineering

#### **Undergraduate Programs (BS)**

An applicant for admission to BS/BSc in mechanical, civil and electrical engineering courses offered by the University must fulfill the following requirements:

- He/she should have obtained at least 60% marks in Intermediate/DAE/B.Sc./B.Tech (Pass) examination excluding sports and Hafiz-e-Quran marks.
- In case of a candidate applying on the basis of B.Sc. degree, he should have also obtained at least 60% marks in Intermediate/ DAE examination.
- He/she should have appeared in the entry test arranged by this University for that particular academic session in which he seeks admission.
- The student should have at least 50% overall adjusted admission marks computed by giving 67% weight to Intermediate/DAE /B.Sc./B.Tech (Pass) examination result and 33% to University Entry.

#### **Graduate Programs (MS)**

- Students seeking admission to MS in M.Sc. Electrical, Mechanical or Civil Engineering earned from a recognized university after 16 years of education and must possess minimum CGPA 2.0 out of 4.0 and 50% in Semester/Annual system in undergrad and registered with PEC.
- NTS test / GAT-GENERAL/ University Test/ subject test (minimum 60% marks)



# CAMPUS FACILITIES

# FREE TRANSPORT

GAUS is the first ever university in the region to provide Free Transportation to all of its students living around upto 100 km distance. This one of the landmark facilities is being provided to the students to make them convenient to reach the university in time and go back home safely. This facility also entails the benefit of saving good amount of money each year, for the students.





## SEMINARS, WORKSHOPS, AND CONFERENCES

GAUS regularly hosts seminars, workshops, and conferences, connecting students with industry leaders, scholars, and professionals. These events foster knowledge-sharing, provide career insights, and expose students to the latest trends in their fields. These activities are essential for skill development and networking opportunities.





## EDUCATIONAL AND RECREATIONAL TOURS

The university organizes educational tours to industries, research centers, and cultural landmarks, alongside recreational trips that allow students to explore different regions. These tours broaden students' perspectives, enhance learning experiences, and provide opportunities for relaxation and bonding.



## STUDENT HOSTELS (BOYS AND GIRLS)

GAUS offers secure and comfortable hostel accommodations for both male and female students, with separate facilities for each. The hostels provide a safe and supportive living environment with all essential amenities, ensuring students' well-being and fostering a sense of community.



## ENGINEERING AND SCIENCE LABS

Our state-of-the-art engineering and science labs are fully equipped with cutting-edge technology and tools. These labs provide hands-on experience for students in various disciplines, allowing them to apply theoretical knowledge to real-world scenarios. The labs foster innovation and practical problem-solving, essential for students' academic and professional growth.



## WELL-EQUIPPED COMPUTER LABS

Our advanced computer labs are furnished with the latest hardware and software facilities offering students the necessary resources for research, coding, data analysis, and other academic activities. With high-speed internet and specialized software, the labs support both individual projects and group collaborations, enhancing learning efficiency.



## LIBRARY



**Mr Jamshaid  
Wazeer Zafar**  
Chief Librarian, GAUS

The University Library and Information Resource Center (LIRC) at Grand Asian University, Sialkot, is a modern, air-conditioned facility that plays a pivotal role in supporting the university's academic programs and research endeavors. It offers a comfortable and conducive environment for study and research, with a spacious seating capacity, designed to accommodate a large number of students at any given time. The LIRC boasts one of the most comprehensive collections of books in Pakistan, housing over 33,000 volumes across various disciplines, in addition to subscriptions to a wide range of foreign and local journals, magazines, and online databases. Equipped with advanced technology, the library ensures easy student access, both in-person and remotely through its live online catalog, enabling students to search holdings and access scholarly journals and e-books from anywhere.

The LIRC is committed to knowledge dissemination through conventional and electronic means, aiming to enhance the intellectual capital of both the university and the broader community. Its Off-Campus Library Services (OCLS) cater to the needs of distant learners and e-students with the same dedication as on-campus users. OCLS ensures the delivery of e-resources, including journal articles and e-books via email. The facility is fully air-conditioned, providing a comfortable atmosphere for focused study, and offers ample seating to ensure students have the space they need for individual and group work. With access to the Higher Education Commission (HEC) Digital Library & E-Library Punjab, the LIRC stands as an indispensable resource, supporting research, academic growth, and a student-centered approach to learning, both on and off-campus. This modern, student-friendly facility is integral to the academic experience at Grand Asian University and fosters learning, research, and innovation.







# CAMPUS LIFE

## CAFETERIA AND SECOND CUP CAFE

The campus features a spacious cafeteria offering diverse and healthy food options, providing a relaxing environment for students to unwind. Additionally, Second Cup Café serves premium coffee and snacks, creating a cozy spot for social interactions or study breaks.



## GRAND MOSQUE

A beautiful Grand Mosque is located at the campus, providing students with a peaceful space for prayer and reflection. The mosque accommodates a large congregation, supporting the spiritual needs of the university community and fostering a sense of unity and tranquility.



## STUDENT SOCIETIES

Our vibrant student societies cater to a wide range of interests, from academic pursuits to creative arts and social causes. These societies encourage leadership, teamwork, and personal growth, providing a platform for students to explore their passions and engage in meaningful activities, and build a strong community.



## EVENTS AND EXTRACURRICULAR ACTIVITIES

GAUS offers a wide range of co-curricular activities from sports to cultural events, to enrich student life. These activities promote physical fitness, creativity, and teamwork, helping students in maintaining a balanced lifestyle while fostering social connections and leadership skills.

### Sports Gala



### Alumni Reunion





## Food Fest 2023



## Qawali Night



## Food Exhibition 2024



**Interactive Session with Dr. Javed Iqbal**



**Interactive Session with Mr. Adeel Hashmi**



**Interactive Session with Soban Attari**





## Interactive Session with Tuaha ibn Jalil



## Dawn Education Expo 2024



## WALKS

## Smog Awareness Walk



## World Food Safety Day



## World Diabetes Day (November 14, 2024)





## Smog Awareness Campaign



## Smog Awareness Projects





# **MEMORANDUM OF UNDERSTANDINGS**



## FOREIGN UNIVERSITY




# AZERBAIJAN UNIVERSITY



**GRAND ASIAN  
UNIVERSITY, SIALKOT**  
A CHARTERED UNIVERSITY



**AZERBAIJAN  
UNIVERSITY**



## MEMORANDUM OF UNDERSTANDING

**Grand Asian University, Sialkot and Azerbaijan University** has signed **Memorandum of Understanding** for students and faculty exchange, establishment of joint research projects, joint research publications, internships and organizing the conferences, seminars, and symposium of mutual interest to both universities

## NATIONAL ORGANIZATIONS

### Gujranwala Electric Power Company (GEPCO)



### Federal Board of Revenue (FBR)



### AirSial



## NATIONAL ORGANIZATIONS

### Sialkot Police



### Rangers



### Mentors







Sahar Ali

## CAREER SERVICES

### **Internship and Job Placement Office**

In line with our commitment to producing industry-ready graduates, Grand Asian University Sialkot has established a dedicated Internship and Job Placement Office. This office serves as a vital link between students and potential employers, facilitating internships, job placements, and career development opportunities. The office works closely with industry partners, including those with whom we have signed MOUs, to ensure that our students gain practical experience and are well-prepared to meet the demands of the job market. Additionally, the office organizes career fairs, employer networking events, and skill development workshops to further enhance student employability.

### **Student Counseling and Career Guidance**

Understanding the importance of holistic student development, the university has strengthened its Student Counseling and Career Guidance services. These services are designed to support students in navigating their academic journey, overcoming personal challenges, and making informed career choices. Our counseling services offer personalized guidance, while career advisors assist students in identifying their strengths, setting career goals, and developing the skills necessary to achieve them. Workshops, seminars, and one-on-one counseling sessions are regularly conducted to ensure that our students are equipped to succeed both academically and professionally.





## STUDENT SUPPORT SERVICES

### **Business Incubation Center**

The Business Incubation Center is designed to support entrepreneurial initiatives by providing resources, mentorship, and guidance. Students can develop and launch their business ideas with access to industry experts, networking opportunities, and a collaborative environment, encouraging innovation and real-world business solutions.

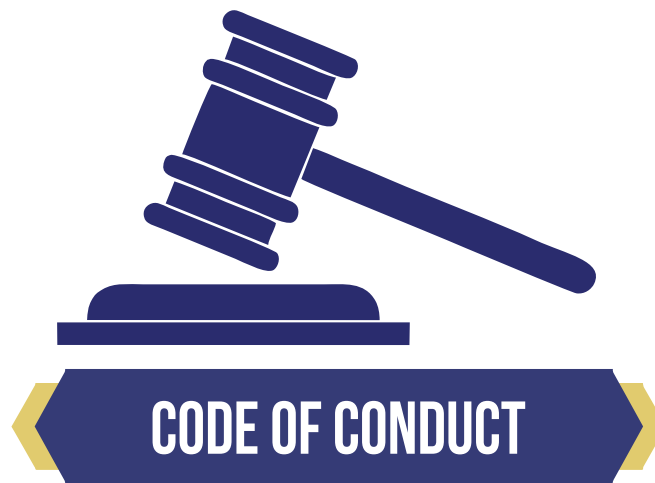
### **Campus Market**

The campus market provides convenient access to essential items, snacks, and other goods for students and staff. It offers a variety of products to meet every day needs, ensuring that students have easy access to supplies without needing to leave the campus.

### **Medical Services**

GAUS is situated adjacent to its own fully equipped hospital, offering comprehensive healthcare services to students and staff. With access to specialized medical professionals, state-of-the-art facilities, and round-the-clock care, students benefit from full medical support during university hours. Regular checkups, emergency services, and advanced treatments are readily available, ensuring that all health needs are promptly addressed within close proximity to the campus.





Grand Asian University is committed to Academic Integrity, which involves upholding ethical standards in all aspects of academic work, including learning, teaching and research. It involves acting with the principles of honesty, morality, trust and responsibility and requires for knowledge and its development.

Students of GAUS are expected to conduct themselves in a manner that reflects these values.

Every student shall observe the following Codes of Conduct:

- Respect teaching, non-teaching staff and others in authority.
- Students must display student ID cards within university premises.
- Cleanliness of mind, speech, habits, body and environment.
- Smoking is prohibited within all buildings of the University.
- Displaying/carrying/putting any badge, sticker, handout, poster or placards.
- Staging, inciting or participating in any walk-out or strike, is prohibited.
- Possession of weapons of any kind in all premises of the University.
- Students are not allowed to have physical touch.

Disciplinary action will be taken in case of misconduct.



## Anti-Ragging Policy

Grand Asian University Sialkot is committed to creating a safe, respectful, and inclusive campus environment. Ragging in any form is strictly prohibited and considered a serious offense. This policy outlines the university's stance against ragging, measures for prevention, and actions to be taken in the event of a violation.

### **Prohibited Conduct :**

- Physical abuse, including but not limited to hitting, slapping, or forcibly restraining.
- Verbal or mental abuse, including teasing, mocking, or threats.
- Any activity that disrupts a student's academic or social life.
- Forcing an individual to perform tasks or participate in activities against their will.

### **Disciplinary Actions:**

- Any student or group found guilty of ragging will face disciplinary action, which may include:
- Suspension or expulsion from the university.
- Withdrawal of scholarships or other academic privileges.

### **Reporting Mechanism:**

- Students can report ragging incidents to the Office of Student Affairs.

Grand Asian University is committed to maintaining a zero-tolerance stance on ragging and expects all community members to uphold this policy to create a safe and welcoming campus for all.

## Attendance Policy

No candidate shall be eligible to appear in an end semester examination unless the following conditions are fulfilled:

1. He has been on the rolls of the university during the semester for which the examination is being held.
2. He is not debarred from taking the examination under the university rules and regulations enforced for the time being.
3. He has attended a minimum of 75% of the total number of lectures delivered, the laboratory periods held, design and practical work done in a course during the semester for which the examination is being held. The head of the concerned department may, for valid reasons, condone this deficiency up to 10% after consultation with the course teacher concerned.
4. If a student does not fulfill the condition of attendance, he shall be awarded an 'F' grade in that course, whether theory or lab. He will have to re-register himself for that course in the summer semester if offered or in a regular semester (as an additional course) in which the course is being offered.
5. The course teacher(s)/Lab teacher(s) concerned will maintain the attendance record for their courses. They will display and forward the list of such candidates who do not fulfill the condition of attendance to the Controller of Examinations through the Head of the Department and the Dean of Faculty, immediately after the completion of the teaching session. Such candidates shall not be allowed to appear in the End Semester Examination of that course.
6. At the end of each month, the teacher concerned shall send to Head of the Department a statement giving the total number of lectures delivered or labs conducted by him together with the number of lectures or labs attended by each student.



## Harassment Policy

Grand Asian University (GAUS) is committed to providing a safe, harassment-free environment for all students. This policy aims to protect students from any form of harassment, discrimination, or abuse, ensuring that every individual is treated with dignity and respect.

This policy covers any unwelcome behavior, verbal or physical, that creates a hostile, intimidating, or offensive environment which includes but is not limited to:

- Unwanted sexual advances, requests for sexual favors, or other verbal, non-verbal, or physical conduct of a sexual nature.
- Repeated, unreasonable actions directed toward a student intended to intimidate, degrade, or humiliate.
- Unfair treatment based on race, gender, religion, ethnicity, nationality, disability, or any other personal characteristic.

### Reporting and Response Procedure

- Students may report harassment through the Student Affairs Office.
- Upon receiving a report, GAUS disciplinary committee will conduct an impartial investigation respecting the confidentiality of all involved parties.
- If a violation is confirmed, GAUS may take disciplinary actions, which can include warnings, suspension, or expulsion depending on the severity of the misconduct.

Retaliation against any student who reports harassment in good faith is strictly prohibited. Any acts of retaliation will be treated as a serious violation of university policy.

GAUS will conduct workshops, orientations, and awareness campaigns regularly to educate students about harassment and the importance of creating a respectful campus culture.



# CONTACT US

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     /Grand Asian University Sialkot

## Admissions Office

 052-3310617-20 |  +92-347-1651564

## Academic Department

 052-3310617-20 Ext:164

## Career Services Office

 052-3310617-20 Ext:145

# APPENDICES



**Broad Campus (Aerial View)**



Composed and Developed by  
Prof. Dr. Muhammad Mushtaq Ahmad,  
Department of Food, Nutrition & Agriculture Sciences  
Designed and Formatted by  
Rabi-ul-Hasnat, Chief Designer, GAUS  
Supported by the Team of Prospectus Development Committee,  
Notified Vide Letter No. GAUS / Registrar 1/28 Sialkot, the 23rd September /2024










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