

# PROSPECTUS

# 2020-21

www.abasynisb.edu.pk

This prospectus presents a brief overview of all the academic programs offered at the Abasyn University, Islamabad Campus. The prospectus shows the overall structure, duration and fees of the academic programs. Candidates who wish to seek admission at Abasyn University are advised to read this prospectus carefully. For further details, candidates are advised to visit our campus, website or call our Admission Office at:

#### **Islamabad Campus**

Park Road, Chak Shahzad, Islamabad – 44000, Pakistan. Email: admissions@abasynisb.edu.pk Website: abasynisb.edu.pk Ph No: 051-111 222 796 Cell No: 0300-918 9006, 0331-989 0066 Fax: 051-843 8325

#### **Peshawar Main Campus**

Ring Road (Charsadda Link), Peshawar, Email: admissions@abasyn.edu.pk Website: abasyn.edu.pk Ph: 091-2247264 & 2582835 Cell No: 0323-9555847 Fax: 091-2248675



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    - BS in Software Engineering (BSSE)
    - MS Computer Science (MSCS)
    - MS Data Sciences (MSDS)
  - Department of Electrical Engineering
    - BE in Electrical Engineering (BEEE)
    - MS in Electrical Engineering (MSEE)
  - Department of Civil Engineering
    - BE in Civil Engineering (BECE)
  - Department of Pharmacy
    - Doctor of Pharmacy (Pharm D)
  - Department of Life Sciences
    - BS in Microbiology (BSMB)
    - BS in Medical Lab Technology (MLT)
    - Doctor of Physical Therapy (DPT)
    - Bs in Human Nutrition & Dietetics
    - BS Radiology Technology
    - BS Prosthetic & Orthotics
    - BS Environmental Sciences
    - M.Phil. Microbiology
    - M.Sc. Microbiology

- Department of Management & Social Sciences
  - Bachelor of Business Administration (BBA)
  - Bachelor of Commerce (B.Com)
  - BS in Accounting and Finance (BSAF)
  - BS English
  - BS Psychology
  - BS in Fashion & Design
  - Master of Business Administration (MBA)
  - Master in Commerce (M.Com)
  - MS in Management Sciences (MSMgt.)
  - MS in Engineering Management (MSEM)
- Department of Technology
  - B.Tech (Hons.) Civil
  - B.Tech (Hons.) Electrical
  - B.Tech (Hons.) Mechanical
- Department of Mathematics & Statistics
  - BS Mathematics / BS MATHS
  - BS Statistics
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# Message from the Chancellor

Education is the core value of a nation, and the function of an educational institution is not only to take care of an individual's academic growth but also to take charge of his/her personal, social, mental, psychological, and spiritual maturity for overall learning and transformation. Only an institution which takes care of all these dynamics can shape a true scholar and a true professional, and Abasyn University is one of its kind in this realm.

Abasyn University, established in 2007 through an Act of Provincial Assembly, has now emerged as a sustainable organization with the grace of Almighty and the committed efforts of the faculty and the management. Within a short span of time, the university has made a number of achievements including a thriving campus at Islamabad.

This is heartening to know that apart from excelling in academic standards, students of Abasyn University actively participate in diverse socio-cultural activities of high standards such as tree plantation, traffic education, blood donation, youth awareness, and community service campaigns, drives, and projects to nurture exceptional values of social importance. The University, energized by its distinguished faculty and strengthened by its brilliant students, now stands in the highest echelons of education in the country and strives to forge new paths for a brighter tomorrow of Pakistan.

I pray to Allah to crown our endeavours with success!

#### **Muhammad Imran Ullah**



# Message from the Vice Chancellor

Great institutions are more than places. They're ideas, and same is true for Abasyn University which is meant to nurture the interplay of ideas, students, and place in ways that serve them all. At Abasyn University we put to work our strongest and most promising academic disciplines and build avenues of access and opportunities for the students.

On behalf of the University community, I welcome you to the world of Abasyn University. This Prospectus gives you an overview of the University's campus,programs and courses with a very blend of highly qualified faculty, excellent infra-structure and handsome enrolment figures, Abasyn University has blossomed into an institution of great eminence.

One of the University's two main roles is to help our students achieve that potential and become what they want to be and what society needs. Our other main role is to generate new knowledge that improves the world and illuminates our understanding of it. We are acknowledged as excelling in both of these roles, and we intend to do even better - hence the ambitious programme of investment in facilities, faculties and staff at Abasyn University will be continuing in the future ahead. Abasyn University has taken full advantage of the modern techniques of communication to facilitate and support its students for better quality education by expert faculty members in a congenial academic environment.

I request you to come and personally visit Abasyn University or go through this prospectus to know more about our academic environment, curriculum and teaching/learning proceedings.

I wish a very bright future for all of you. I hope that after getting admission and education at Abasyn University, you will become an asset for the country and you will be able to play an important role for the development and prosperity of yourself, your family and the people of Pakistan.

Dr. Syed Umar Farooq



# Message from the **Executive Director**

Abasyn University embodies the message in its tag line -

#### Passion to design futures

Established in 2012, Abasyn University Islamabad Campus (AUIC) is committed to provide high-quality education and equipping students with knowledge and skill necessary to address both local and global challenges. Within the short span of its existence, the AUIC has achieved remarkable success and continues to forge its future with new program initiative, modern curriculum, cutting edge research activities, student engagement, faculty development, international collaborations, industry collaboration and much more. Making transformative impact on students, faculty, industry and society is the aim of these programs.

As we look into the future, one thing is certain – knowledge will be a highly sought-after key resource within Pakistan and around the world. Our challenge is to help to generate ideas that will benefit society, and to educate and train people to work in fields where they will be valued both for their specialized knowledge, and for their ability to communicate and solve problems.AUIC provides many opportunities to grow academically, intellectually and socially. At AUIC, we emphasize on critical thinking, technology awareness, interpersonal competencies and practical life skills. Our programs for faculty development ensure a dynamic and futuristic environment for teaching and research

As an Executive Director, I am committed to attracting a body of faculty and students dedicated to academic excellence, pedagogical sophistication, research, and service to society.

I look forward to welcoming you to Abasyn University Islamabad Campus.

### Dr. Amjad Mahmood



# Welcome to Abasyn University

We offer:

- High quality academic experience
- Strong student support facilities
- Accredited and approved academic programs
- Lively and stimulating environment for growth
- State of the art lecture rooms, laboratories, library and IT facilities.
- World class research facilities to support its PhD program in collaboration with partner universities.
- Resources to help develop your study skills and produce original work.
- Faculty involved in industrial research using research projects to inform undergraduate lectures and seminars.

# Introduction to Abasyn University

Abasyn University, Peshawar is chartered by the Government of Khyber Pakhtunkhwa (KPK) and recognized by the Higher Education Commission (HEC), Pakistan. Abasyn University was the only University in KPK which was awarded category 'W' at the inception which was the highest category to be awarded to any institution in the old ranking system by HEC. By the grace of Allah and the support of sponsors and staff, HEC has upgraded category 'W' to 'W3' in the new ranking system. Abasyn University offers degree programs in various disciplines including Engineering, Computing, Business Administration, Pharmacy, Life Sciences, Education and Technology. National Computing Education Accreditation Council (NCEAC), HEC has accredited BS in Computer Science and BS in Software Engineering programs offered by the University. The University also offers BE in Electrical Engineering and BE in Civil Engineering programs accredited by the Pakistan Engineering Council (PEC). The University has been permitted by the Pharmacy Council of Pakistan (PCP) to run Pharm-D program.



# Introduction to Abasyn University Islamabad Campus

HEC granted NOC via letter No. 16-64/HEC/A&A/2010/401 to Abasyn University to open its campus at Islamabad. The University has established state of art facilities in Chak Shahzad Islamabad for the campus. Highly qualified teaching and non teaching staff have been hired. The campus has also established fully equipped labs with latest state of the art technologies and tools. The campus has also developed a well stocked library which has access to digital research databases, e-journals, e-books and e-reports.



## **Vision Statement**

Aspiring for a transformative impact on society through academic excellence and growth.

### **Mission Statement**

To build a nationwide knowledge community through quality education, relevance, critical thinking, creativity, research, and high sense of social responsibility







# Aims and Objectives of the University

The main objective of the university is to provide high quality, comprehensive educational, training and research opportunities that produce highly gualified graduates and responsible citizens who are able to meet the needs of all sectors of human activity. The University offers to its students relevant qualifications, including professional training, which combine high-level knowledge and skills, using courses and content continually tailored to the present and future needs of society.





### General Goals of the University are:

- To pursue excellence in education and research by developing relevant curriculum.
- b. To produce graduates who possess high quality abilities to contribute towards the development of society.
- c. To encourage students to challenge current theories and practices.
- d. To encourage students to break new grounds and cultivate leadership quality.
- e. To develop strong interpersonal and communication skills in its graduates.

### **Benefits to the Students**

Abasyn University aims to provide relevant education to its students which will provide many career opportunities to them.

In fulfilling its mission Abasyn University cultivates following qualities in its students:

- a. A strong foundation of knowledge and skills,
- b. A research culture which they will use in practical life,
- c. An understanding of mutual respect for all ethnic and cultural groups,
- d. A sense of being responsible citizens of the society, and
- e. Values of hard work and dedication



# Academic Departments and Programs at

# Islamabad Campus

- Department of Computing
  - BS in Computer Science (BSCS)
  - BS in Software Engineering (BSSE)
  - MS Data Sciences (MSDS)
  - MS Software Engineering (MSSE)
  - MS Computer Science (MSCS)
  - MS Telecom & Networks (MST&N)
- Department of Electrical Engineering
  - BE in Electrical Engineering (BEEE)
  - MS in Electrical Engineering (MSEE)
  - Department of Civil Engineering
    - BE in Civil Engineering (BECE)
- Department of Pharmacy
  - Doctor of Pharmacy (Pharm D)
- Department of Life Sciences
  - BS in Microbiology (BSMB)
    - BS in Medical Lab Technology (MLT)
    - Doctor of Physical Therapy (DPT)
    - Bs in Human Nutrition & Dietetics
    - BS Radiology Technology
    - BS Prosthetic & Orthotics
    - BS Environmental Sciences
    - M.Phil. Microbiology
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  - Department of Management & Social Sciences
    - Bachelor of Business Administration (BBA)
    - Bachelor of Commerce (B.Com)
    - BS in Accounting and Finance (BSAF)
    - BS English
    - BS Psychology
    - BS in Fashion & Design
    - Master of Business Administration (MBA)
    - Master in Commerce (M.Com)
    - MS in Management Sciences (MSMgt.)
    - MS in Engineering Management (MSEM)
    - MS in Logistic & Supply Chain Management (MSLSM)
    - MS in Project Management (MSPM)
  - Department of Technology
    - B.Tech Civil
    - B.Tech Electrical
    - B.Tech Mechanical
    - Department of OF Mathematics & Statistics
      - BS Mathematics / BS MATHS
      - BS Statistics

PhD Programs

### Department of Computing

Department of Computing is a leading department in Abasyn University Islamabad Campus with state of the art lab facilities and highly qualified faculty members. The department is committed in providing quality education such that students are equipped with knowledge, leadership skills, ability to engage in life-long learning and professional integrity along with the strong sense of social responsibility. The department offers an Outcome Based Education (OBE) system which is focused

### BS in Computer Science (BSCS)

The basic intention of BS Program in Computer Science is to develop the students' critical professional thinking and intuition. The program is a balanced mix of theory and practical experiences at foundation and advance levels. The Computer Science graduates will be able to assume responsible positions in business, government, and higher education sectors.

### **Program Educational Objectives (PEOs)**

The Program Educational Objectives describe the career and professional accomplishments that the graduates are expected to attain within a few years of graduation.

The Program Educational Objectives (PEOs) are focused on to produce BSCS graduates who:

on achieving specific quality attributes a student should have while progressing through the degree program.

The Department of Computing offers the following two 4-year (8 semesters) undergraduate degree programs:

- BS Computer Science (BSCS)
- BS Software Engineering (BSSE)

- Are competent, employable and demonstrate sound knowledge and skills meeting needs of the modern computing practice and software industry.
- Are effective in communication and interpersonal skills with high professional and ethical standards.
- Are engaged in continuous pursuit of knowledge through research, continuous education and/or professional development.

### Program Learning Outcomes (PLOs)

Program learning outcomes serve as a guide for students and faculty to ensure that the graduates have knowledge and skills required for successful professional career. By the time of graduation, the CS program enables students to:

- Apply knowledge of computing and mathematics appropriate to the discipline.
- Analysvtve a problem, and identify and define the computing requirements appropriate to its solution.
- Design, implement and evaluate a computer-based system, process, component, or program to meet desired needs.
- Function effectively on teams to accomplish a common goal.
- Understand professional, ethical, legal, security, and social issues and responsibilities.

- Communicate effectively with a range of audience.
- Analyze the local and global impact of computing on individuals, organizations and society.
- Recognize the need for, and an ability to engage in, continuing professional development.
- Use current techniques, skills, and tools necessary for computing practice.
- Apply mathematical foundation, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of tradeoffs involved in design choices.
- Apply design and development principles

Code	Course	CrHrs	Pre-Requisite
CS100	Intro. to Computing	2+1	None
CS106	Intro. to Computer Programming	3+1	None
SS104	English-I (Comprehension)	3+0	None
NS109	Applied Physics	2+1	None
MT112	Calculus-I	3+0	None
SS108	Islamic Studies	2+0	None

### **Semester Plan**

### Semester II

Semester I

Code	Course	CrHrs	Pre-Requisite
CS200	Object Oriented Programming	3+1	CS106
SS203	English-II (Communication Skills)	3+0	SS104
MT114	Multi-Variate Calculus (Calculus-II)	3+0	MT112
EE200	Digital Logic Design	3+1	NS101
SS118	Pakistan Studies	2+0	None

### Semester III

Code	Course	CrHrs	Pre-Requisite
CS251	Computer Organization and Assembly Language	3+1	EE200
CS210	Data Structure and Algorithms	3+1	CS200
SE242	Software Engineering	3+0	None
MT221	Linear Algebra	3+0	None
SS216	Intro. to Sociology	3+0	None

### Semester IV

Code	Course	CrHrs	Pre-Requisite
CS385	Database Management Systems	3+1	CS210
CSxxx	CS Elective – I	3+0	None
CS304	Design & Analysis of Algorithms	3+0	CS210
MG100	Fundamental of Accounting	3+0	None
SS218	Into. To Psychology	3+0	None

### Semester V

Code	Course	CrHrs	Pre-Requisite
CS313	Operating System Concepts	3+1	CS210
CSxxx	CS Elective – II	3+0	None
MT201	Discrete Structure	3+0	None
CS310	Theory of Automata	3+0	None
SS401	Research Methodology and Professional Ethics	3+0	None
CSxxx	CS Elective – III	3+0	None

### Semester VI

Code	Course	CrHrs	Pre-Requisite
CSxxx	CS Elective – IV	3+0	None
CS321	Computer Networks	3+1	None
CS307	Artificial Intelligence	3+1	CS210
MT301	Statistics & Probability	3+0	None
SS211	English-III (Technical Report Writing)	3+0	SS203

### Semester VII

Code	Course	CrHrs	Pre-Requisite
CS428	Distributed and Parallel Computing	3+0	CS213
CS401	Compiler Construction	3+0	CS310
MT307	Graph Theory	3+0	None
MT303	Numerical Computing	3+0	None
CS499	Final Year Project-I	0+3	None

### Semester VIII

Code	Course	CrHrs	Pre-Requisite
MG404	Entrepreneurship	3+0	None
CS390	Information Security	3+0	None
CSxxx	CS Elective – V	3+0	None
CS499	Final Year Project-II	0+3	CS499

### **List of Electives**

Code	Title	CrHrs
CS442	Advanced Database Programming	3
CS309	Distributed Database Systems	3
CS315	Data Warehousing	3
CS316	Data Mining	3
CS317	Object Oriented Database Systems	3
CS204	Management Information System	3
CS433	Graph Databases	3
CS407	e-Commerce/Business	3
CS415	Advanced Computer Networks	3
CS431	Multimedia Networks	3
CS217	Visual Programming	3
CS375	Mobile Application Development	3
CS428	Network Security and Cryptography	3
CS318	Network System Management	3
CS409	Wireless Networks Communication	3
CS319	Network Simulation	3
CS468	Mobile Communication	3
CS336	Network Security Architecture	3
CS434	Ad-hoc Networks	3
CS410	Software-Defined Networks	3
CS463	Artificial Neural Network	3
CS318	Financial Accounting Software	3
CS432	Human Computer Interaction	3
CS413	Web Engineering	3
CS414	Semantic Web	3
CS421	Web Security	3

Code	Title	CrHrs
CS221	Web Programming Language	3
CS491	Special Topics in Computer Science*	3
CS443	Digital Image Processing	3
CS208	Modern Programming Languages	3+0
CS334	Big-Data Processing	3
CS335	Cloud Computing	3
CS429	Embedded and Real Time Systems	3
CS430	Microprocessor Interfacing	3
BT346	Bio-Informatics	3
CS410	Fuzzy Logic	3
CS424	Machine Learning	3
CS411	Computer Vision	3
CS412	Natural Language Processing	3
CS337	Decision Support System	3
CS339	Intelligent Agents	3

### \*Subject to the consent and approval of HoD



### BS in Software Engineering (BSSE)

Software Engineering is the practice of creating and implementing large, reliable, efficient and economical software by applying the principles and practices of engineering. The basic intention of BS Program in Software Engineering is to train students in all aspects of software life cycle from requirements specification through analysis and design to testing, maintenance and evolution of software product; such that by means of critical analysis and creativity, reallife problems are addressed in an effective manner.

#### **Program Educational Objectives (PEOs)**

The Program Educational Objectives describe the career and professional accomplishments that the graduates are expected to attain within a few years of graduation.

The Program Educational Objectives (PEOs) are focused on to produce BSSE graduates who:

- Are competent, employable and demonstrate sound knowledge and skills meeting needs of the modern computing practice and software industry.
- Are effective in communication and interpersonal skills with high professional and ethical standards.
- Are engaged in continuous pursuit of knowledge through research, continuous education and/or professional development.

### Program Learning Outcomes (PLOs)

Program learning outcomes serve as a guide for students and faculty to ensure that the graduates have knowledge and skills required for successful professional carrer. By the time of graduation, the SE program enables students to:

- Apply knowledge of mathematics, science and engineering.
- Design and conduct experiments, as well as to analyze and interpret data.
- Design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- Function on multidisciplinary teams.
- Identify, formulate and solve engineering problems.
- Understand professional and ethical responsibility.
- Communicate effectively
- Understand the impact of engineering solutions in a global, economic, environmental and societal context.
- Recognize the need for, and an ability to engage in life-long learning.
- Harness knowledge of contemporary issues.
- Use the techniques, skills, and modern engineering tools necessary for engineering practice.

### Semester plan

### Semester I

Code	Course	CrHrs	Pre-Requisite
CS100	Intro. To Computing	2+1	None
CS106	Intro. To Computer Programming	3+1	None
SS104	English-I (Comprehension)	3+0	None
NS109	Applied Physics	2+1	None
MT112	Calculus & Analytical Geometry (Calculus-I)	3+0	None
SS108	Islamic Studies	2+0	None

### Semester II

Code	Course	CrHrs	Pre-Requisite
CS200	Object Oriented Programming	3+1	CS106
SE242	Software Engineering	3+0	None
SS203	English-II (Communication Skills)	3+0	SS104
MT221	Linear Algebra	3+0	None
SS118	Pakistan Studies	2+0	None

### Semester III

Code	Course	CrHrs	Pre-Requisite
CS210	Data Structures & Algorithms	3+1	CS200
SE253	Software Requirement Engineering	3+0	SE242
SE432	Human Computer Interaction	3+0	SE242
SE443	Web Engineering	3+0	None
SS216	Intro. to Sociology	3+0	None

### Semester IV

Code	Course	CrHrs	Pre-Requisite
CS313	Operating Systems Concepts	3+1	CS210
CS385	Database Management System	3+1	CS210
SE317	Software Design & Architecture	2+1	SE253
SExxx	SE Elecitve – I	3+0	SE443
SS218	Into. To Psychology	3+0	None

#### Semester V

Code	Course	CrHrs	Pre-Requisite
SE250	Software Construction and Development	2+1	SE317
MT301	Probability and Statistics	3+0	
SS401	Research Methodology & Professional Ethics	3+0	
SE318	Formal Methods in Software Engineering	3+0	
MG100	Fundamentals of Accounting	3+0	None
MT201	Discrete Structures	3+0	

### Semester VI

Code	Course	CrHrs	Pre-Requisite
SE321	Software Quality Engineering	3+0	SE242
CS321	Computer Networks	3+1	
SExxx	Supporting – II	3+0	
SS211	English-III (Technical & Business Writing)	3+0	SS203
SExxx	SE Elecitve – II	3+0	
SExxx	SE Elecitve – III	3+0	

### Semester VII

Code	Course	CrHrs	Pre-Requisite
SE424	Software Project Management	3+0	SE242
SE308	Software Re-Engineering	3+0	SE252
SExxx	SE Supporting - III	3+0	
SExxx	SE Elecitve – IV	3+0	
CS499	Final Year Project - I	0+3	

### Semester VIII

Code	Course	CrHrs	Pre-Requisite
SExxx	SE Elecitve – V	3+0	
CS390	Information Security	3+0	
MG404	Entrepreneurship	3+0	
CS499	Final Year Project - II	0+3	

### **List of Elective Courses**

Code	Title	CrHrs	Code	Title	CrHrs
SE401	Secure Software Development	3	CS217	Visual Programming	3
SE400	Software Testing	3	CS432	Concepts of Programming Languages	3
SE300	Object Oriented Software Engineering	3	CS375	Mobile Application Development	3
SE412	Software Metrics	3	CS443	Digital Image Processing	3
SE450	Design Patterns	3	CS422	Distributed and Parallel Computing	3
SE312	Risk Management	3	CS33/	Big-Data Analytics	3
SE452	Advanced Software Engineering	3	C\$335	Cloud Computing	2
CS318	Financial Accounting Software	3	C5333	Decision Support System	2
CS414	Semantic Web	3	C3337	Intelligent Agents	2
CS421	Web Security	3	C5355	Machine Learning	2
CS442	Advanced Database Programming	3	CS424	Computer Vision	2
CS309	Distributed Database Systems	3	CS411	Natural Language Processing	3
CS315	Data Warehousing	3	CS412	Modern Programming Language	3
CS221	Web Programming Language	3	CS208	Rio-Informatics	3
CS317	Object Oriented Database Systems	3	B1346	Multimodia Natuorka	3
CS338	Management Information System	3	CS431	Artificial Neural Network	3
CS/33	Graph Databases	3	CS463	Special Topics in Software	3
CS300	Data Science	3	SE416	Engineering*	3
CS407	e-Commerce/Business	3		X A 1 X 1 X 1	

\*Subject to the consent and approval of HoD

### Labs

The university has established well equipped labs for computing programs. The department has well equipped General Programing Labs, Systems Lab, Software Testing Lab, Digital Logic Design lab and Data Communication & Networks Lab.



### **MS in Computer** Sciences (MSCS)

MS in Computer Science is an advanced degree program in the area of computer sciences which is aimed at preparing students for advanced and research oriented jobs in the area. Most of the courses in this program are designed in such a way that students are required to exhibit high level skills in research activities. Apart from core courses, students are also required to take courses from one of the specialization areas of their own choice to fulfill the requirements of MS degree.

Category	CrHr	Remarks
Core Courses	06	Core courses are compulsory. A list of two core courses is pro- vided as per the HEC criteria.
Specialization Courses	06	A number of specialization ar- eas have been identified. Stu- dents are required to take three courses from the specialization

**Program Structure** 

area of their own choice. Elective Courses 12 A number of common elective courses are identified which are useful for computing discipline, students are required to take minimum one course from this category. 06 Intensive research to be conducted under the supervision of a faculty member. A student may take 2 elective courses

insted of thesis.



Thesis

### Area of Specialization

- **Computer Networking**
- Databases and Web Technologies

30

- Software Engineering
- **Mobile Computing**



### **Core Courses**

Code	Course	CrHrs
CSC502	Advanced Theory of Computation	3+0
CSC501	Advanced Design and Analysis of Algorithms	<mark>3+</mark> 0



Code	Course	CrHrs
CSC504	Advanced Computer Architecture	3+0
CSC551	Advanced Programming	3+0
CSC507	Information Theory	3+0
CSC508	Numerical Method	3+0
CSC522	Fuzzy Logic	3+0
CS523	Genetic Algorithm	3+0
CSC513	Advanced Network Security	3+0
CSC514	Advanced Network Programming	3+0
CSC521	Advanced Artificial Neural Networks	3+0
CSC515	Mobile Computing	3+0
CSC531	Advanced Software Engineering Techniques	3+0
CSC532	Software Quality Assurance	3+0

List of elective courses may be revised as per requirement.

### **Semester Plan**

### Semester I

Code	Course	CrHrs
CS5xx	Advanced Analysis of Algorithms	3
CS5xx	Advanced Operating Systems	3
CS5xx	Theory of Programming Languages	3
	- VIIIIM MIGGIOII	

### Semester II

Code	Course	CrHrs
CS5xx	Advanced Computer Architecture	3
CS5xx	Elective-I	3
CS5xx	Elective-II	3
SS5xx	Research Methodology	1

### Semester I

Code	Course	CrHrs
CS5xx	Elective-III	3
CS5xx	Thesis-I	3

### Semester II

Code	Course	CrHrs
CS5xx	Elective-IV	3
CS5xx	Thesis-II	3

### MS in Software Engineering (MSSE)

MS in Software Engineering program is designed very carefully to cater for the need of various stakeholders. As software engineering is facilitating other sciences as well therefore the curriculum of MSSE is developed in such a way to prepare students to identify problems, provide solutions for the existing problems in commercial, financial, or other types of organizations. This degree program integrates theoretical and practical aspects of computer science discipline and its applications to various business systems. The design and use of the computer based solution to variety of problems is another major aspect to be studied during the MSSE program.

The program provides an opportunity to students to choose a specific area of the computing discipline for their specialization. The whole degree program consists of 30 credit hours.

### **Program Structure**

Category	CrHr	Description
Core Courses	06	Core courses are compulsory. A list of 2 core courses is designed as per the HEC criteria which will be offered to students in the first two- three semesters.
Elective- Courses	18	A number of specialization areas have been identified. Students are required to take three courses from the specialization area of their own choice.
Thesis	06	Intensive research to be conducted under the supervision of a faculty member.
Total	30	

### Area of Specialization

- Software Testing
- Software Quality Management
- Software Project Management





### **Core Courses**

Code	Course Title	CrHrs
SE501	Software Requirement Engineering	3+0
SE502	Software Quality Assurance	3+0

### **Elective Courses**

Code	Elective Courses		
SE511	Formal Methods in Software Engineering		
SE512	Software Risk Management		
SE513	Software Design Patterns		
SE514	Software Measurement and Metrics		
SE515	Software Engineering Processes		
SE516	Software Engineering for Web based and Distributed Systems		
SE517	Engineering Software for Reliability and Quality		
SE518	Software Costing and Estimation		
SE519	Business Process Modeling		
SE520	Personal Software Process		
SE522	Theory of Programming Languages		
SE523	Special topics in Software Engineering		
SE524	Software Testing		
SE525	Advanced programming		
SE526	Advanced Software Engineering Techniques		
SE257	Agile Software Development		
SE258	Human Factors in Software Engineering		
SE259	Software Engineering for Enterprise Information Systems		
SE300	Machine Learning Applications in Software Engineering		
SE301	Advanced Object Oriented Software design		
SE302	Software Engineering using UML		

List of elective courses may be revised as per requirement.

### **Semester Plan**

### Semester I

Code	Course Title	CrHrs
SE5xx	Advanced Requirements Engineering	3
SE5xx	Advanced Software System Architecture	3
SE5xx	Elective I	3

### Semester II

Code	Course Title	CrHrs
SE5xx	Software Testing and Quality Assurance	3
SE5xx	Elective-II	3
SE5xx	Elective-III	3

### Semester I

Code	Course Title	CrHrs
SE5xx	Elective-IV	3
SE5xx	Thesis-I	3

### Semester II

Code	Course Title	CrHrs
SE5xx	Elective-V	3
SE5xx	Thesis-II	3



### MS in Telecommunication and Networks (MSTN)



MS in Telecommunication and Networks is an advanced course designed to enable the students to take on the current challenges in the Telecommunication industry and be prepared for the challenges of tomorrow. The program is designed to impart both theoretical knowledge and practical skills to its students.

MSTN program provides students with broad range of knowledge and practical skills required to excel in Telecom industry today. Students are also introduced to a number of latest computer tools to enable them to work in the industry without an on job training. The program provides an opportunity to students to choose a specific area of the discipline for their specialization.

The whole degree program consists of 30 credit hours. However, the number of credit hours may be more in case students have not completed 4 years engineering education after F.Sc /A-Level.

### **Program Structure**

Category	CrHr	Description
Core Courses	15	Core courses are com- pulsory. A list of five core courses is devel- oped as per the HEC criteria which will be offered to students in the first two-three se- mesters.
Elective Courses	09	A number of specializa- tion areas have been identified. Students are required to take three courses from the spe- cialization area of their own choice.
Thesis	06	Intensive research to be conducted under the supervision of a faculty member.
Total	30	

### Area of Specialization

- Network Security
- Mobile Computing
- Wireless Communication
- Artificial Intelligence and Image Processing



### **Core Courses**

Code	Cource	CrHr
TLC509	Wireless Communication Networks	3+0
TLC503	Digital Communication	3+0
TLC512	Advanced Data Networks	3+0
TLC504	Mathematical Methods in Communication	3+0
TLC508	Advanced Digital Signal Processing	3+0

### **Semester Plan**

### Semester I

Codes	Course	CrHrs
TLC512	Advanced Data Networks	3+0
TLC5XX	Mathematical Methods in Communication	3+0
TLC508	Advanced Digital Signal Processing	3+0

### Semester II

Codes	Course	CrHrs
TLC5XX	Elective I	3+0
TLC503	Digital Communication	3+0

### Semester III

Codes	Course	CrHrs
TLC509	Wireless Communication Networks	3+0
TLC5XX	Elective II	3+0
TLC599	Thesis (I)	3+0

#### **Semester IV**

Codes	Course	CrHrs
TLC5XX	Elective III	3+0
TLC599	Thesis (II)	3+0

### **Elective Courses**

Code	Cource	
TLC5XX	Random Variable and Stochastic Processes	3+0
TLC507	Wireless Communication	3+0
TLC514	Networks Design	3+0
TLC531	Network Comm & Performance Engineering	3+0
TLC532	Switching Systems	3+0
TLC533	Satellite Communication	3+0
TLC513	Advanced Network Security	3+0
TLC534	Signal Processing in Wireless Communication	3+0
TLC521	Advanced Artificial Neural Networks	3+0
TLC535	IP Telephony	3+0
TLC514	Advanced Network Programming	3+0
TLC515	Mobile Computing	3+0
TLC536	Application Development for Mobile Devices	3+0
TLC542	Industry overview and telecom- munication management	3+0
TLC543	Telecom System Analysis and Planning and Design	3+0
TLC544	International Telecommunica- tion Management	3+0
TLC537	Advanced Telecom and Mobile Networking Lab	3+0
TLC545	Financial Decision Making and Risk Analysis	3+0
TLC5XX	Next Generation Network (NGN)	3+0
TLC514	Advanced Network Programming	3+0

List of elective courses may be revised as per requirement.

### MS in Electrical Engineering (MSEE)

Abasyn University is one of the fast growing private universities in Pakistan to offer various degree programs in Computing and Engineering disciplines. The University has successfully launched various academic programs in these areas in the last few semesters. The University has now planned a full-fledged master degree program in Electrical Engineering which will be launched at all of its campuses from Fall Semester 2013. The main goal of the program is to create specialists to solve many of the industrial problems faced by the nation. Electronics, Communication, Computing, Image processing and intelligence systems will be the main areas of study and research. Hands on practice, real world applications, case studies and activity led learning (ALL) methodologies will be used to implement curriculum. The graduate of the program will be highly useful for the job at the international companies.

Major Outcomes of the program:

- Ability to investigate technology and tools
- Ability to design and propose new methods
- Ability to design solution to problem faced by computing and engineering industries.
- · Ability to work independently
- Ability to produce impact factor research

### **Program Structure**

Similarly other master programs MSEE curriculum is also divided into various categories, such as core, electives,

specialization courses and thesis. A 6 CrHr thesis is compulsory part of the MSEE curriculum. All students will be required to complete thesis on individual basis. The course work of the MSEE program consists of 9 CrHr core and 15 CrHr elective and specializations courses.

Category	CrHr	Description
Core Courses	09	Core courses are compulsory. A list of core courses is designed based on latest trend in Electrical Engineering as per the HEC criteria which will be offered to students in the initial three semesters. Students will be required to choose three core courses from the list after a consultation with the HoD/Dean.
Elective Courses	15	A number of specialization areas have been identified. Relevant courses for each specialization area are listed. Students will be required to complete four courses from the chosen area.
Thesis	6	Intensive research to be conducted in this course. The University encourages Master students to publish their research work at international forums.
Profes- sional workshops	0	All students will be required to take at-least two professional workshops during the entire degree program. The Depart- ment will arrange workshops on various tools and tech- niques for graduate students.
Total	30	

### **Core Courses**

Code	Course	CrHrs
EE601	Probability and Random Processes	3
EE602	Advanced Digital Signal Processing	3
EE603	Advanced Digital Design	3
EE604	Advanced Digital Communication	3
EE605	Advanced Engineering Mathematics	3
EE606	Advanced Computational Techniques	3
EE607	Advanced Research Methodology*	3
EE758	Information Theory and Coding	3
EE750	Advanced Power System Analysis	3
EE733	Discrete Time Control System	3

\* Thesis is compulsory.

### List of Specialization and Electives

Code	Course	CrHrs
EE620	Advanced Linear Algebra	3
EE621	Advanced Computer Programming	3
EE622	Advanced Topics in Electrical Engineering	3
EE623	Numerical Device Modeling	3
EE624	Optimization Techniques	3
EE625	Advanced Artificial Intelligence	3
EE626	Multi Topics in Computer Architecture	3
EE627	Advanced Design and analysis of Algorithms	3
EE628	Advanced Operating System	3
EE629	Advanced Micro Processor and Interfacing	3
EE6xx	Digital IC Design	3
EE 711	Detection and Estimation Theory	3
EE 712	Error Control Coding	3
EE 713	Cellular Radio Network Planning	3
EE 714	Optical Communication Systems	3
EE 715	Advanced Wireless Communication	3
EE 716	Advanced Communication Networks	3
EE717	Special Topics in Communication	3
EE718	Space time Communication	3
EE721	Advanced Digital Image Processing	3
EE722	Pattern Recognition	3

### Department of Electrical Engineering



### BE in Electrical Engineering

The Department of Electrical Engineering (EE) is currently running bachelor program in electrical engineering (BEEE) to meet the needs of the country. The department is designed and developed along the modern lines which are tailored to impart and strengthen the students' knowledge in Electrical Engineering and its related specialties. The BE Electrical Engineering program is duly approved and accredited by Pakistan Engineering Council (PEC).

Since launching of the program in fall 2012, BEEE is progressing rapidly to become a promising program in developing professional electrical engineers. The department has a capacity to accommodate 160 undergraduate students. EE labs are well equipped with the state-of-the-art equipment for its undergraduate program.

The BEEE program is designed to produce

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quality professional engineers with abilities to design, manage and operate electrical engineering-based projects. The program effectively provides a strong foundation for those wishing to pursue a career in electrical engineering through a diverse range of theoretical knowledge and practical skills. The program is based on solid foundations of mathematics and sciences and hands on training in well-equipped labs augmented by industrial visits and study tours.

### **Program Mission**

The mission of the Electrical Engineering department is to "excel in quality education and research adhering to a sense of social responsibility and teamwork skills".

### Program Educational Objectives (PEOs)

The graduates of BEEE program are expected to

- Be competent engineers who exhibit theoretical and practical knowledge in industry and/or academia.
- Practice engineering in an ethical and socially responsible manner.
- Demonstrate interpersonal and management skills and engage in professional growth.

### Program Learning Outcomes (PLOs)

The graduates of Electrical Engineering program will attain the following attributes:

1. Engineering Knowledge: An ability to apply knowledge of mathematics, science andengineering fundamentals and an



Ppas. = lpas. = 5 engineering specialization to the solution of complex engineering problems.

- Problem Analysis: An ability to identify, formulate, research literature, and analyzecomplex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- Design/Development of Solutions: An ability to design solutions for complexengineering problems and design systems, components or processes that meet the specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- 4. Investigation: An ability to investigate complex engineering problems in a methodicalway including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.
- Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling to complex engineering activities, with an understanding of the limitations.
- The Engineer and Society: An ability to apply reasoning informed by contextualknowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex

engineering problems.

- Environment and Sustainability: An ability to understand the impact of professionalengineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.
- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
- Individual and Team Work: An ability to work effectively as an individual or in ateam, on multifaceted and/or multidisciplinary settings.
- 10. Communication: An ability to communicate effectively, orally as well as in writing,on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. Project Management: An ability to demonstrate management skills and applyengineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.
- 12. Lifelong Learning: An ability to recognize importance of, and pursue lifelong learningin the broader context of innovation and technological developments.

### Semester Plan

#### Semester I

Code	Course	CrHr	Pre- Requisite
EE112	Workshop Practice	0+1	None
SS108	Islamic Studies/ Ethics (for non-Muslims)	2+0	None
CS100	Introduction to Computing	1+1	None
MT101	Calculus & Analytical Geometry	3+0	None
NS111	Applied Physics	3+1	None
SS104	English I (Functional English)	3+0	None

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Code	Course	CrHr	Pre- Requisite
EE116	Linear Circuit Analysis	3+1	None
EE121	Engineering Drawing	0+1	None
CS114	Programming Fundamentals	3+1	CS100
MT118	Differential Equations	3+0	MT101
SS203	English II (Communication Skills)	3+0	SS104
SS2xx	Humanities and Social Sciences Elective	3+0	

### Semester III

Ir Pre- Requisite
1 None
1 EE116
0 None
0 MT111
0 None

### Semester IV

Code	Course	CrHr	Pre- Requisite
EE213	Electrical Network Analysis	3+1	EE116
EE223	Signals & Systems	3+1	MT214
EE224	Electronic Circuit Design	3+1	EE215
CS210	Data Structures & Algorithms	3+1	CS114
SS118	Pakistan Studies	2+0	None

### Semester V

Code	Course	CrHr	Pre- Requisite
EE302	Embedded Systems	3+1	CS114
EE311	Electromagnetic Field Theory	3+0	NS111
EE313	Probability Methods in Engineering	3+0	MT101
EE315	Electrical Machines	3+1	EE116
EE316	Digital Signal Processing	3+1	EE223

### Semester VI

Code	Course	CrHr	Pre- Requisite
EE321	Communication Systems	3+1	EE223
EE322	Linear Control Systems	3+1	EE223
EE324	Measurement & Instrumentation	3+1	EE215
EE411	Power Electronics	3+1	EE215
SS214	English – III (Technical Report Writing)	3+0	SS203

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#### Semester VII

Code	Course	CrHr	Pre- Requisite
EE312	Applied Thermodynamics	3+0	None
EE4xx	Technical Elective – I	3+1	EE213
EE4xx	Technical Elective – II	3+0	EE313
EE499	Senior Design Project – I	0+3	
SS401	Research Methodology and Professional Ethics	3+0	None

#### Semester VIII

Code	Course	CrHr	Pre- Requisite
EE421	Computer Communication Networks	3+1	EE321
EE434	Power System Analysis	3+0	EE213
EE499	Senior Design Project – II	0+3	
MG435	Engineering Economics & Management	3+0	None
MG436	Entrepreneurship	2+0	None

### **List of Electives**

The following list is not exhaustive. Universities /Institutes may expand the list as per their requirements as per PEC Electrical Engineering Curriculum 2011-2012.

Code	Title	CrHrs	Code	Title	
EE411	Power Electronics	3+1	EE433	Power Distribution and Util	
EE412	Digital Electronics	3+1	EE434	Power System Analysis	
EE413	Solid State Devices	3+0	EE435	Renewable Energy Systems	
FF414	Industrial Electronics	3+0	EE441	Computer Architecture	
EE422	Digital Communication	3+1	EE442	Digital System Design	
FF423	Wave Propagation and Antennas	3+1	EE443	Operating Systems	
FF424	Wireless and Mobile Communication	3+0	EE444	Artificial Intelligence	
FF425	Transmission and Switching	3+0	ist of elective courses may be re-		
FF431	Introduction to Power Engineering	3+0	requirement.		
EE432	Power Generation	3+1			

#### cture 3+1 ign 3+1 3+0 ce 3+0 ay be revised as per

### List of Humanities and Social SciencesElectives

Code	Title	CrHrs
SS2xx	Professional Ethics	3+0
SS216	Sociology for Engineers	3+0
SS2xx	Critical Thinking	3+0
SS2xx	Organizational Behavior	3+0
SS218	Professional Psychology	3+0



CrHrs

3+1

3+0

3+0

and Utilization

### Department of Civil Engineering



### BE in Civil Engineering (BECE)

The BE Civil Engineering program is designed and developed along the modern lines tailored to impart and strengthen the students' knowledge in civil engineering and its related specialties. Since launching of the program in Fall 2014, BECE is progressing rapidly to become a promising program in developing profession in civil engineers. The education process is based on Outcome Based Education System which is focused at achieving certain specified outcomes in terms of individual student's learning (as specified in Washington Accord). The education structure and curriculum is structured to achieve the outcomes, capabilities and qualities as outlined by Pakistan Engineering Council. The Civil Engineering Department is equipped with the state-of-the-art labs and computing facilities.

The BECE is a 4 years (8 semesters) program. BECE program envisages extensive outdoor training in engineering surveying in the field and camp. On job internship training is also hallmark of this program.

### **Program Mission**

"To provide students with quality education fundamentals. in civil engineering applications and design; that prepares professional engineering community; who will nationally and globally practice engineering and undertake research with professional ethics & social responsibilities through good teamwork, interpersonal skills and engagement with partners; embarking the students in lifelong learning while socially and economically impacting the society"

### **Program Educational Objectives**

The graduates of BECE program are expected to;

1. Engage in civil engineering profession based upon their knowledge and technical skills, with global, societal and sustainable perspectives.

2. Demonstrate high professional ethics, obligations, responsibility, effective communication, teamwork and good leadership in their professional career.

3. Engage in lifelong learning and professional development by pursuing graduate studies, research or other opportunities to achieve professional excellence while economically contributing towards the society.

### Program Learning Outcomes (PLOs)

The graduates of BECE are expected to have an ability to:

1. Apply knowledge of mathematics, science and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
2. Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

3. Design solutions for complex engineering problems and design systems, components or processes that meet the specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

4. Investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.

5. Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling to complex engineering activities, with an understanding of the limitations.

6. Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

7. Understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

8. Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

9. Work effectively as an individual or in a team, on multifaceted and/or

multidisciplinary settings.

10. Communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

12. Recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

### **Civil Engineering Labs**

The University has established well equipped labs for the Department of Civil Engineering where well trained lab engineers and other technical staff is available to conduct the experimental training and research work in various specialties of civil engineering. Following labs are functional to undertake lab classes of the program:

- Engineering Materials Testing and Teaching Lab
- Concrete and Concrete Materials Lab
- Engineering Mechanics Lab
- Engineering Survey Lab
- Engineering Drawing Lab
- Computer Programming and Designing Lab
- Soil Mechanics and Geotechnical Engineering Lab
- Fluid Mechanics Lab

- Hydrology and WRM Lab
- Hydraulic and Irrigation Engineering Lab
- Environmental Engineering Lab
- Transportation Engineering Lab
- Construction Engineering & Management Lab



### **Semester Plan**

### Semester I (Cr. Hours =15)

Code	Course	CrHr	Pre- Requisite
CE112	Civil Engineering Materials	2+1	None
CE115	Basic Electrical-Mechanical Engineering	2+1	None
CE210	Civil Engineering Drawing	1+2	None
SS104	Functional English	2+0	None
SS118	Pakistan Studies	1+0	None
MT103	Applied Calculus	3+0	None

### Semester II (Cr. Hours =17)

Code	Course	CrHr	Pre- Requisite
CE111	Engineering Mechanics	3+1	None
CE215	Engineering Surveying	2+1	None
CE226	Engineering Geology	2+0	None
SS108	Islamic Studies	2+0	None
CS112	Computing & Programming	1+2	None
MT115	Applied Differential Equations	3+0	MT103

### Semester III (Cr. Hours =17)

Code	Course	CrHr	Pre- Requisite
CE216	Mechanics of Solids-1	2+1	None
CE311	CAD & Graphics	1+2	CE210
CE315	Advance Engineering Surveying	2+1	CE215
CE330	Architecture & Town Planning	3+0	None
MT300	Numerical Analysis	3+0	None
MG434	Engineering Economics	2+0	None

### Semester IV (Cr. Hours =17)

Code	Course	CrHr	Pre- Requisite
CE201	Fluid Mechanics	3+1	None
CE213	Soil Mechanics	3+1	None
CE214	Structural Analysis-1	3+0	CE111
CE326	Construction Engineering	3+0	None
MT301	Probability & Statistics	2+1	None

### Semester V (Cr. Hours =18)

Code	Course	CrHr	Pre- Requisite
CE301	Advance Fluid Mechanics	3+1	CE201
CE320	Reinforced Concrete Design-I	3+1	None
CE317	Mechanics of Solids-II	3+0	CE216
CE324	Quantity & Cost Estimation	2+1	CE311, CE215
SS204	Business Communication	2+0	SS104
SS201	Professional Ethics	2+0	None

### Semester VI (Cr. Hours =19)

Code	Course	CrHr	Pre- Requisite
CE305	Environmental Engineering-1	2+1	None
CE319	Transportation Engineering-I	3+0	None
CE318	Structural Analysis-II	3+0	CE214
CE329	Engineering Hydrology	2+1	None
CE327	Construction Management	2+1	CE326
CE415	Reinforced Concrete Design-II	3+1	CE320

### Semester VII (Cr. Hours =16)

Code	Course	CrHr	Pre- Requisite
CE404	Geotechnical & Foundation Engineering	3+1	CE213
CE406	Environmental Engineering-2	2+0	CE305
CE419	Transportation Engineering-II	3+1	CE319
CE499	Civil Engineering Project	0+3	None
MG3xx	Management Science Elective	3+0	None

### Semester VIII (Cr. Hours =14)

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Code	Course	CrHr	Pre- Requisite
CE304	Geo-Informatics	1+1	None
CE424	Hydraulics & Irrigation Engineering	3+1	CE301
CE425	Steel Structures	3+0	None
CE499	Civil Engineering Project	0+3	None
MG4xx	Social Science Elective	2+0	None



# Department of Pharmacy

# Doctor of Pharmacy (Pharm D)

The Department of Pharmacy offers 5-years Doctor of Pharmacy (Pharm-D) program. The department has highly qualified and motivated faculty. The department has a number of State-of-vythe-art labs to support students for their practical work. Library and other facilities are also available at the campus.

### **Program Mission**

To prepare doctor of pharmacy graduates who enter into the profession prepared for current professional practices in a variety of core settings through a high quality contemporary curriculum emphasizing quality education, practical skills and research to cater for the needs for competent professionals locally and globally.

### **Program Educational Objectives**

The graduates of Pharm-D are expected to:

- Demonstrate excellence in profession through in depth knowledge and skills as pharmacists in health care systems, pharmacy practice, industry, regulation, academia and research and development.
- 2. Demonstrate the strong ethical and



professional values, communication, interpersonal and social skills and self-improvement.

3. Engage in continuous professional development and lifelong learning.

### **Program Learning Outcomes**

The Doctor of Pharmacy (Pharm-D) program prepares graduates who, upon graduation, are expected to:

- Professional Skills. Provide professional services in various fields of the profession like clinical, hospital, community, drug regulation, industry, academia and research and development.
- 2. Pharmaceutical care. Design, implement, evaluate, and modify patient-specific, pharmaceutical care plans in cooperation with patients and other health care team members in accordance with established standards of practice.
- 3. Design and Development. Identify physicochemical properties of drug substances that affect solubility, pharmacologic actions, and stability to design, develop and analyze dosage forms and drug delivery systems.
- 4. Distribution and Storage. Participate in and manage the systems for distribution, storage, retail sale and dispensing of sterile and non-sterile medications and

associated medical products.

- 5. Drug Interactions. Prevent, minimize or predict drug interactions, adverse effects and contraindications associated with the care plan.
- Care Plan Outcomes. Provide patientcentered care and population-base care by disease state management and safe usage of medication to optimize care plan outcomes.
- Health Information. Provide health care information regarding lifestyle, medication and other non-drug measures that promote health or prevent the progression of a disease or medical condition.
- Problem Analysis. Identify and analyze complex pharmaceutical and health related problems reaching substantial conclusion using the principles of basic medical, pharmaceutical and related sciences.

- Management Skills. Apply pharmaceutical management principles to set up and manage pharmaceutical projects from start to end as a team member or as a leader.
- 10. Communication Skills. Demonstrate effective interpersonal, oral and written communications skills as a team member as well as individually to interact with health care professionals, patients and stakeholders.
- 11. Ethics. A commitment to apply ethical principles, professional ethics, responsibilities, norms and comply with the laws of pharmaceutical practice.
- 12. Lifelong Learning. Recognize importance of, and pursue, lifelong learning and further the body of knowledge in the broader context of development of the profession.



# **Semester Plan**

### Semester I

Code	Course	CrHr
SS103	English-A (Functional English)	3+0
PD103	Pharmaceutics-IA (Physical Pharmacy)	3+1
PD101	Pharmaceutical Chemistry-IA (Organic)	3+1
PD102	Pharmaceutical Chemistry-IIA (Biochemistry)	3+1
PD104	Physiology-A	3+1
PD105	Anatomy & Histology	3+1

### Semester II

Code	Course	CrHr
SS124	English-B (Communication & Writing Skills)	3+0
PD127	Pharmaceutics-IB (Physical Pharmacy)	3+1
PD123	Pharmaceutical Chemistry-IB (Organic)	3+1
PD126	Pharmaceutical Chemistry-IIB (Biochemistry)	3+1
PD128	Physiology-B	3+1

### Semester III

Code	Course	CrHr
SS108	Islamic Studies	2+0
PD201	Pharmaceutics-IIA (Dosage Forms Science)	3+1
PD204	Pharmaceutics-IIIA (Pharmaceutical Microbiology & Immunology)	3+1
PD202	Pharmacology and Therapeutics-IA	3+1
PD203	Pharmacognosy-IA (Basic)	3+1
MT211	Pharmacy Practice-IA (Pharmaceutical Mathematics)	3+0

### Semester IV

Code	Course	CrHr
SS118	Pakistan Studies	2+0
PD221	Pharmaceutics-IIB (Dosage Forms Science)	3+1
PD224	Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology)	3+1
PD222	Pharmacology and Therapeutics-IB	3+1
PD223	Pharmacognosy-IB (Basic)	3+1
MT226	Pharmacy Practice-IB (Bio-statistics)	3+0

### Semester V

Code	Course	CrHr
PD305	Pharmacy Practice-IIA (Dispensing Pharmacy)	3+1
PD304	Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis)	3+1
PD302	Pharmacology and Therapeutics-IIA	3+1
PD303	Pharmacognosy-IIA (Advanced)	3+1
PD301	Pathology	3+1

### Semester VI

Code	Course	CrHr
PD328	Pharmacy Practice-IIB (Community, Social & Administrative Pharmacy)	3+0
PD327	Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis)	3+1
PD325	Pharmacology and Therapeutics-IIB	3+1
PD326	Pharmacognosy-IIB (Advanced)	3+1
PD329	Pharmacy Practice-III (Computer and its Applications in Pharmacy)	3+1

### Semester VII

Code	Course	CrHr
PD330	Pharmacy Practice-IVA (Hospital Pharmacy-I)	3+0
PD331	Pharmacy Practice-VA (Clinical Pharmacy-I)	3+1
PD332	Pharmaceutics-IVA (Industrial Pharmacy-I)	3+1
PD334	Pharmaceutics-VA (Biopharmaceutics & Pharmacokinetics-I)	3+1
PD335	Pharmaceutics-VIA (Pharmaceutical Quality Management-I)	3+1

### Semester VIII

Code	Course	CrHr
PD401	Pharmacy Practice-IVB (Hospital Pharmacy-II)	3+0
PD402	Pharmacy Practice-VB (Clinical Pharmacy-II)	3+1
PD403	Pharmaceutics-IVB (Industrial Pharmacy-II)	3+1
PD404	Pharmaceutics-VB (Biopharmaceutics & Pharmacokinetics-II)	3+1
PD405	Pharmaceutics-VIB (Pharmaceutical Quality Management-II)	3+1

### Semester IX

Code	Course	CrHr
PD432	Pharmaceutics-VIIA (Pharmaceutical Technology-I)	3+1
PD431	Pharmacy Practice-VIA (Advanced Clinical Pharmacy-I)	3+1
PD433	Pharmacy Practice-VIIA (Forensic Pharmacy- I)	3+0
PD434	Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing-I)	3+0
PD430	Pharmaceutical Chemistry-IVA (Medicinal Chemistry-I)	3+1

### Semester X

Code	Course	CrHr
PD442	Pharmaceutics- VIIB (Pharmaceutical Technology-II)	3+1
PD441	Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II)	3+1
PD443	Pharmacy Practice-VIIB (Forensic Pharmacy-II)	3+0
PD444	Pharmacy Practice-VIIIB (Pharmaceutical Management & Marketing-II)	3+0
PD440	Pharmaceutical Chemistry-IVB (Medicinal Chemistry-II)	3+1



# Department of Life Sciences

The Department of Life Sciences offers undergraduates programs in Microbiology, Phycial Therapy, Radiology Technology and Medical Lab Technology, Human Nutrition & Dietetics, Environmental Sciences, Prosthetic & Orthotics. It also offers MSc. and M.Phil Programs in Microbiology.

# BS in Microbiology

Bachelor of Science in Microbiology is a four year program which is offered to candidates having completed 12 years of pre-medical education. The program covers all minor and major aspect of the discipline. Graduates with this degree will be able to work in industries, hospitals, and research organizations. The curriculum has been designed to match national and international standards.

### **Semester Plan**

#### Semester I

Code	Course	CrHr	Pre-requisite
SS104	English-I (Comprehension)	3+0	None
SS108	Islamic Studies or ethics for non-Muslim	2+0	None
MT100	Basic Mathematics	3+0	None
MB203	Fundamental of Microbiology	2+1	None
MB102	Microbial Taxonomy	2+1	None
CS100	Introduction to computing	2+1	None

#### Semester II

Code	Course	CrHr	Pre-requisite
SS203	English-II (Communication Skills)	3+0	SS104
MB105	Cell Biology	2+1	None
MB206	Parasitology	2+1	None
MB107	Biochemistry-1	3+0	None
SS118	Pakistan Study	2+0	None
MT210	Biostatistics	3+0	MT100

### Semester III

Code	Course	CrHr	Pre-requisite
SS211	English-III (Technical Report writing)	3+0	SS203
MB207	Biochemistry-II	2+1	MB107
SS216	Introduction to Sociology	3+0	None
MB208	Microbial Anatomy and Physiology	2+1	None
MB212	Principle of Virology	3+0	None
MB316	Soil Microbiology	2+1	None

### Semester IV

Code	Course	CrHr	Pre-requisite
MB217	Molecular Biology	2+1	None
MB216	Mycology	2+1	None
MB205	Enzymology	2+1	None
MB223	Immunology	3+0	None
MB312	Introduction to cell & Tissue culture	2+1	MB105

### Semester V

Code	Course	CrHr	Pre-requisite
MB219	Medical Microbiology	3+0	None
MB304	Biotechnology	3	None
MB318	Food and Dairy Microbiology	3	None
MB314	Industrial Microbiology	3+0	None
MB346	Bioinformatics	2+1	None
MB317	Environmental Microbiology and Public Health	2+1	None

### Semester VI

Code	Course	CrHr	Pre-requisite
MB313	Clinical Bacteriology	3+0	None
MB402	Antimicrobial Antiviral Agents	2+1	None
MB426	Infectious Disease Diagnostics	2+1	None
MG403	Entrepreneurship	3+0	None
MB427	Medical Virology	2+1	None

### Semester VII

Code	Course	CrHr	Pre-requisite
MB428	Microbial Ecology	2+1	None
SS401	Research Methodology	3+0	SS203
MB406	Genetic Engineering	3	None
MB4xx	Elective - I	3+0	None
MB4xx	Elective - II	3+0	None
MB499	Project/Internship – I	3+0	None

### Semester VIII

Code	Course	CrHr	Pre-requisite
MB436	Veterinary Microbiology and Animal health	2+1	None
MB437	Microbial Pathogenesis	2+1	None
MB4xx	Elective -III	3+0	None
MB4xx	Elective -IV	3+0	None
MB499	Project/Internship – II	3+0	None

### **List of Electives**

Code	Course	CrHr
MB429	Molecular Mechanism of Antimicrobial Drugs	2+1
MB423	Epidemiology	3+0
MB436	Marine and Fresh Water Microbiology	3
MB425	Analytical Chemistry and Instrumentation	3
MB437	Clinical Hematology in Microbial Disease	2+1
MB438	Clinical Mycology	2+1
MB430	Biosafety and Risk Management	3+0
MB431	Environmental Biotechnology	2+1
MB434	Hospital waste Managements	3+0
MB432	Radio Biology	3+0
MB433	Food Biotechnology	3+0
MB435	Diagnostic Chemistry for Microbial Diseases	3+0

List of elective courses may be revised as per requirement.





# BS in Medical Lab Technology

Medical Laboratory Technology (MLT) is one of the most rapidly expanding health care fields. As a medical laboratory technician, you will play an increasingly important role in health care delivery. The MLT Program provides extensive training, including supervised clinical internship. This program perpares highly compintent medical laboroty technologiest. This program provides students with both the therotical and clicnical experance in various ares of clicinal laborty science.

### **Semester Plan**

#### Semester I

Code	Course	CrHr	Pre-requisite
LT107	Biochemistry-I	3+1	None
LT102	Human Physiology-I	3+1	None
LT103	Human Anatomy-I	3+1	None
SS104	English-I	3+0	None
SS108	Islamic Studies	2+0	None
CS100	Introduction to computing	2+1	None

#### Semester II

Code	Course	CrHr	Pre-requisite
LT117	Biochemistry-II	3+1	LT107
LT112	Human Physiology-II	3+1	LT102
LT113	Human Anatomy-II	3+1	LT103
SS203	English-II	3+0	SS104
SS118	Pak Studies	2+0	None
LT207	Medical Microbiology-I	2+1	None

#### Semester III

Code	Course	CrHr	Pre-requisite
LT201	General Pathology-I	2+1	None
LT202	General Pharmacology-I	2+1	None
LT203	Clinical Bacteriology	2+1	None
LT204	Hematology-I	2+1	None
LT205	Human Genetics	2+1	None
SS211	Communication Skills	3+0	SS104
LT217	Medical Microbiology-II	2+1	LT207

### Semester IV

### Semester V

Code	Course	CrHr	Pre-requisite
LT301	WBC and Platelets Disorders	2+1	None
LT302	Histopathology	2+1	None
MT210	Biostatistics	3+0	None
LT304	Clinical Parasitology	2+1	None
LT305	Clinical Pathology	2+1	None
LT306	Biotechnology	3+0	

### Semester VI

Code	Course	CrHr	Pre-requisite
LT307	Medical Laboratory Instrumentations	2+1	None
LT346	Bioinformatics	1+2	None
LT309	Immunology & Serology	2+1	
SS401	Research Methodology and Professional Ethics	3+0	
LT311	Blood Banking	2+1	
LT312	Advances in Medical Laboratory Technology	1+2	

### Semester VII

Code	Course	CrHr	Pre-requisite
LT401	Medical Laboratory Management Skills	2+1	
LT402	Fundamentals of Infection Control	1+1	
LT403	Molecular Biology	2+1	
LT404	Epidemiology	2+0	
LT405	Systemic Diagnostic Bacteriology	2+1	
LT410	Cytology and Cytogenetics	2+1	

### Semester VIII

Code	Course	CrHr	Pre-requisite
LT499	Research Project	6	
LT490	Seminar	1+0	
LT408	Medical Sociology	2+1	
LT409	Bioethics	1+1	

# Doctor of Physical Therapy

Physical therapy is an essential segment of modern health care system. It is a science of healing and art of caring. It pertains to the clinical examination, evaluation, assessment, diagnosis and treatment of musculoskeletal, Neurological, Cardio-Vascular and Respiratory systems functional disorders including symptoms of pain, physiological, edema. structural and psychosomatic ailments. It deals with methods of treatment based on movement. manual therapy, physical agents, and therapeutics modalities to relieve the pain and other complications. Hence, Physical therapy covers basic parameters of healing sciences preventive, i.e. promotive, diagnostic, rehabilitative, and curative.

### **Program Objectives**

The objectives of the Doctor of Physical Therapy (DPT) Program is to prepare physical therapists who will:

- 1. Be primary providers of physical therapy care.
- 2. Serve as responsible members in the professional community and are willing and able to assume leadership roles in the communities they serve.
- Identify researchable problems, advocate and participate in research, and incorporate research findings into clinical practice.
- 4. Understand and place in context the social, economic and cultural issues of practice and effectively advocate for changes in policy.

- 5. Correlate theory with practice and think creatively about, react to, adapt or shape new practice environments.
- 6. Participate in and provide education for communities, patients, peers, students and others.

### **Program Learning Outcomes**

The program prepares graduates who, upon graduation, are expected to:

- Demonstrate in-depth knowledge of the basic and clinical sciences relevant to physical therapy, both in their fundamental context and in their application to the discipline of physical therapy. Understand, correlate and apply theoretical foundations of knowledge to the practice of physical therapy; evaluate and clarify new or evolving theory relevant to physical therapy.
- Demonstrate the behaviors of the scholarly clinician by developing and utilizing the process of critical thinking and inquiry, particularly focused on the improvement of the practice of physical therapy and the delivery of health care.
- Engage in reflective practice through sound clinical decision making, critical self-assessment and commitment to lifelong learning.
- 4. Demonstrate mastery of entry level professional clinical skills. Provision of these services is based on the best

available evidence and includes physical therapy examination, evaluation, diagnosis, prognosis, intervention, prevention activities, wellness initiatives and appropriate health care utilization.

- Prepared to influence the development of human health care regulations and policies that are consistent with the needs of the patient and of the society.
- 6. Demonstrate leadership, management,

and communication skills to effectively participate in physical therapy practice and the health care team.

- 7. Incorporate and demonstrate positive attitudes and behaviors to all persons.
- Demonstrate the professional and social skills to adapt to changing health care environments to effectively provide physical therapy care.



### **Semester Plan**

### Semester I

Code	Course	CrHr	Pre-requisite
DP103	ANATOMY-I	3+1	NONE
DP104	PHYSIOLOGY-I	2+1	NONE
DP106	KINESIOLOGY-I	2+1	NONE
SS104	ENGLISH-I	3	NONE
SS118	PAKISTAN STUDIES	2	NONE
MT210	BIOSTATISTICS-I	3	NONE

#### Semester II

Code	Course	CrHr	Pre-requisite
DP113	ANATOMY-II	3+1	DP103
DP114	PHYSIOLOGY-II	2+1	DP104
DP116	KINESIOLOGY-II	2+1	DP106
SS203	ENGLISH-II	3	SS104
SS108	ISLAMIC STUDIES	2	NONE
MT320	BIOSTATISTICS-II	3	MT210

### Semester III

Code	Course	CrHr	Pre-requisite
DP203	ANATOMY-III	2+1	DP113
DP204	PHYSIOLOGY-III	2+1	DP114
SS211	ENGLISH-III	3=3	SS203
DP201	MEDICAL PHYSICS	2+1	NONE
DP107	BIOCHEMISTRY-I	2=2	NONE
DP206	BIOMECHANICS-I	3=3	NONE

### Semester IV

Code	Course	CrHr	Pre-requisite
DP213	ANATOMY-IV	2+1	DP203
DP207	BIOCHEMISTRY-II	2+1	DP107
DP209	EXERCISE PHYSIOLOGY	2+1	DP204
DP205	HEALTH & WELNESS	2=2	NONE
DP210	MOLECULAR BIOLOGY	2=2	NONE
DP204	BIOMECHANICS-II	2+1	DP206

### Semester V

Code	Course	CrHr	Pre-requisite
DP301	PATHOLOGY&MICROBIO-I	2=2	NONE
DP302	PHARMACOLOGY & THER-I	2=2	NONE
DP303	PHYSICAL AGENT&ELECT-I	2+1	NONE
DP304	THERAPEUTIC EXERCISES	2+1	NONE
DP319	SUPERVISED CLINCAL -I	3=3	NONE
SS219	BEHAVIORAL SCIENCES	2=2	NONE

### Semester VI

Code	Course	CrHr	Pre-requisite
DP311	PATHOLOGY&MICROBIO-II	2+1	DP301
DP312	PHARMACOLOGY & THER-II	2=2	DP302
DP313	PHYSICAL AGENT&ELECT-II	2+1	DP303
DP315	COMMUNITY MEDICINE&R	3=3	NONE
DP329	SUPERVISED CLINCAL -II	3=3	DP319
SS216	SOCIOLOGY	2=2	NONE

### Semester VII

Code	Course	CrHr	Pre-requisite
DP401	MEDICINE-I	3=3	NONE
DP402	SURGERY-I	3=3	NONE
DP403	RADIOLOGY&DIAGNOSTIC	2+1	NONE
DP404	MUSCULOSKELETAL PT	2+1	NONE
DP405	EVIDENCE BASED PRACTICE	2+1	NONE
DP339	SUPERVISED CLINCAL-III	0+3	DP329

### Semester VIII

Code	Course	CrHr	Pre-requisite
DP411	MEDICINE-II	3=3	DP401
DP412	SURGERY-II	3=3	DP402
DP413	NEUROLOGICAL PT	2+1	NONE
DP414	SCIENTIFIC INQUIRY	2+1	NONE
DP415	EMERGENCY PROCEDURES	2+1	NONE
DP349	SUPERVISED CLINCAL-IV	0+3	DP339

### Semester IX

Code	Course	CrHr	Pre-requisite
DP431	CARDIOPULMONARY PT	2+1	NONE
DP432	PROSTHETICS&ORTHOTICS	2=2	NONE
DP433	DIFFERENTIAL DIAGNOSIS	3=3	NONE
DP434	MANUAL THERAPY	2+1	NONE
DP435	PROFESSIONAL PRACTICE	2=2	NONE
DP436	INTEGUMENTARY PT	2=2	NONE
DP437	SUPERVISED CLINCAL-Y	0+3	DP349

### Semester X

Code	Course	CrHr	Pre-requisite
DP441	OBSTETRICS& GYNAE	2=2	NONE
DP442	PAEDIATRIC PT	2=2	NONE
DP443	GERIATRIC PT	2=2	NONE
DP444	SPORTS PT	2=2	NONE
DP419	SUPERVISED CLINCAL-VI	0+4	DP437
DP449	RESEARCH PROJECT	6=6	

# BS in Human Nutrition & Dietetics

The objective of BS Human Nutrition & Dietetics program is to develop professionals with in-depth knowledge and skills in screening and planning dietary interventions in diverse population suffering from communicable and noncommunicable diseases. The highly qualified faculty is engaged in delivering and up-to-date curriculum that meets the market demands. The department has well-equipped laboratories, purposefully build lecture halls and a library. A real exposure in the Community and industry is given to the students by study trips, projects, clinical training and clinical clerkships.

### **Semester Plan**

### Semester I

Code	Course	CrHr
HN102	Fundamentals of Human Nutrition	3+0
HN103	Essentials of Food Science & Technology	2+1
HN1XX	Mathematics OR	3+0
SS103	Essentials of Biology	2+1
HN105	English-I	3+0
SS118	Introductory Biochemistry	2+1
BCH-307	Pakistan Studies	2+0

### Semester II

Code	Course	CrHr
HN1XX	Macronutrients in Human Nutrition	3+0
SS203	English-II	3+0
SS108	Islamic Studies/Ethics	2+0
HN106	Human Anatomy	2+1
HN114	Human Physiology-I	2+1
HN1XX	Fundamentals of Sociology	3+0

### Semester III

Code	Course	CrHr
HN107	Micronutrients in Human Nutrition	3+0
HN114	Human Physiology-II	2+1
SS211	English-III	3+0
HN205	Introductory Molecular Genetics	2+1
HN204	Food Microbiology	2+1
HN104	Food Safety and Quality Management	2+0

### Semester IV

Code	Course	CrHr
HN2XX	Bio-Statistics	3+0
HN2XX	Computer Science and Information Technology	2+1
HN2XX	Assessment of Nutritional Status	2+1
HN2XX	Nutrition Through the Life Cycle	3+0
HN2XX	General Pathology	2+1
HN2XX	Food Analysis	2+1

### Semester V

Code	Course	CrHr
HN3XX	Dietetics-I	2+1
HN3XX	Nutrition and Psychology	3+0
HN3XX	Nutritional Education and Awareness	2+1
HN3XX	Meal Planning and Management	2+1
HN3XX	Public Health Nutrition	2+1
HN3XX	Food and Drug Laws	2+0

### Semester VI

Code	Course	CrHr
HN3XX	Dietetics-II	2+1
HN3XX	Functional Foods and Nutraceuticals	3+0
HN3XX	Nutrition Through Social Protection	2+0
HN3XX	Sports Nutrition	2+1
HN3XX	Infant and Young Child Feeding	2+1
HN3XX	Clinical Biochemistry	2+1

### S<mark>emeste</mark>r VII

Code	Course	CrHr
HN4XX	Dietetics-III	2+1
HN4XX	Global Food Issues	3+0
HN4XX	Research Methods in Nutrition	3+0
HN4XX	Nutritional Practices in Clinical Care	2+1
HN4XX	Medical Nutrition Therapy	3+0

### Semester VIII

Code	Course	CrHr
HN4XX	Internship/Project	0-6

### Elective Courses (2 courses equal to 5 credit hours)

Code	Course	CrHr
Elective	Nutritional Immunology	3(3-0) EC
Elective	Drug-Nutrient Interactions	2(2-0) EC
Elective	Food Chemistry	2(2-0) EC
Elective	Preventive Nutrition	3(3-0) EC
Elective	Nutrition in Emergencies	3(3-0) EC

### Elective Courses (2 courses equal to 5 credit hours)

Code	Course	CrHr
Elective	Food Toxins & Allergens	3(3-0) EC
Elective	Nutritional Deficiency Disorders	3(3-0) EC
Elective	Food Supplements	2(2-0) EC
Elective	Metabolism of Nutrients	2(2-0) EC
Elective	Nutrition Epidemiology	2(2-0) EC







# BS in Radiology Technology

The BS Radiology Technology combines the underlying science and technologies of medical imaging. The curriculum of the program emphases on theoretical knowledge and practical skills required to understand how medical images are formed and appreciating and what images revel in

the clinical context. The department has the services of highly of qualified faculty, technologists and paramedical staff as its disposal for effective delivery of the program.

### **Semester Plan**

### Semester I

Code	Course	CrHr	Pre-requisite
RT1XX	Biochemistry-I	2+1	
RT1XX	Human Physiology-I	2+1	
RT1XX	Human Anatomy-I	3+1	
SS104	English-I	3+0	
SS118	Pak studies	2+0	
CS100	Introduction to Computing	2+1	

#### Semester II

Code	Course	CrHr	Pre-requisite
RT1XX	Biochemistry-II	2+1	
RT1XX	Human Physiology-II	2+1	
RT1XX	Human Anatomy-II	3+1	
SS203	English-II	3+0	
RT1XX	Islamic studies	2+0	

#### Semester III

Code	Course	CrHr	Pre-requisite
RT2XX	Regional and Radiological Anatomy-I	2+1	
RT2XX	General Radiology	2+1	
RT2XX	Radiation Sciences and Technology	2+1	
RT2XX	General Pathology	2+1	
RT2XX	General Pharmacology	2+1	
SS211	English-III	3+0	

### Semester IV

Code	Course	CrHr	Pre-requisite
RT2XX	Clinical Medicine-I	2+0	
RT2XX	Regional and Radiological Anatomy-II	2+1	
RT2XX	Conventional Radiological & Clinical Practice	2+1	
RT2XX	Radiological Positioning	2+1	
RT2XX	Computed & Digital Radiography (CR & DR)	2+1	
RT2XX	Radiobiology & Radiation Protection	2 +1	

### Semester V

Code	Course	CrHr	Pre-requisite
RT3XX	Computed Tomography(CT)	2+1	
<b>RT3XX</b>	Mammography & Special Radiological Techniques	2+1	
<b>RT3XX</b>	Magnetic Resonance Imaging (MRI)	2+1	
RT3XX	General Surgery	2+1	
<b>RT3XX</b>	Interventional Radiology	2+1	
RT3XX	Clinical Medicine-II	2+1	
RIJXX		2+1	

### Semester VI

Code	Course	CrHr	Pre-requisite
RT3XX	Radiological & Cross sectional Anatomy	2+1	
RT3XX	Computed Tomography (CT) Procedures & Clinical Prac-	2+1	
RT3XX	Magnetic Imaging(MRI)Procedures & Clinical	2+1	
RT3XX	Therapeutic Radiology	2+1	
MT210	Biostatistics	3+0	
RT3XX	Research Methodology	2+1	

### Semester VII

Code	Course	CrHr	Pre-requisite
RT4XX	Clinical Sonography	2+1	
RT4XX	Angiography and Cardiac Imaging	2+1	
RT4XX	Nuclear Medicine	2+1	
RT4XX	Echocardiography	2+1	
RT4XX	Electrocardiography(ECG)	2+1	
RT4XX	Clinical Pathology & Radiological Presentation	2+1	

### Semester VIII

Code	Course	CrHr	Pre-requisite
RT4XX	Patient care & Management	2+0	
RT4XX	Medical Sociology	2+0	
RT4XX	RESEARCH PROJECT	06	
RT4XX	Bio-ethics	2-0	
RT4XX	Bio-entrepreneurship	2-0	

# BS in Orthotics and Prosthetics

### **Semester Plan**

#### Semester I

Code	Course	CrHr	Pre-requisite
OP1XX	Mathematics / Biology	3 (3, 0)	
OP1XX	Introduction to Orthotics & Prosthetics & workshop	4 (4, 0)	
OP1XX	Behavioral Sciences (Psychiatry & Psychology)	2 (2, 0)	
OP1XX	Introduction to Physics	3 (3, 0)	
OP1XX	Introduction to Computing Applications	2 (2, 0)	
OP1XX	Islamic Studies / Ethics	2 (2, 0)	

### Semester II

Code	Course	CrHr	Pre-requisite
OP1XX	Upper Limb & General Anatomy	3 (2, 1)	
OP1XX	Systemic Physiology	3 (2, 1)	
OP1XX	Materials Technology	3 (3, 0)	
OP1XX	Functional English	3 (3, 0)	
OP1XX	Pakistan Studies	2 (2, 0)	
OP1XX	Biochemistry	2 (2, 0)	

### Semester III

Code	Course	CrHr	Pre-requisite
OP2XX	Lower Limb Anatomy	3 (2, 1)	
OP2XX	Physiology of Nervous System, Neuro-muscular	3 (2, 1)	
OP2XX	Pathology	2 (2, 0)	
OP2XX	Orthopaedic interventions in Orthotics & Prosthetics	3 (3, 0)	
OP2XX	Technical Drawing	3 (2, 1)	
OP2XX	Introduction to Physiotherapy	2 (2, 0)	

### Semester IV

Code	Course	CrHr	Pre-requisite
OP2XX	Head & Neck (vertebral column)	3 (2, 1)	
OP2XX	Rehabilitation and sports Medicine & Mobility aids	4 (3, 1)	
OP2XX	Metal Work	3 (2, 1)	
OP2XX	Electro Work	3 (2, 1)	
OP2XX	Lathe Machine Work	3 (2, 1)	
OP2XX	Bio-Statistics	2 (2, 0)	

### Semester V

Code	Course	CrHr	Pre-requisite
OP3XX	Upper Limb Orthotics I	3 (2, 1)	
OP3XX	Spinal Orthotics I	3 (2, 1)	
OP3XX	Lower Limb Orthotics I	3 (2, 1)	
OP3XX	Upper Limb Prosthetics I	3 (2, 1)	
OP3XX	Lower Limb Prosthetics I	3 (2, 1)	
OP3XX	Biomechanics I	3 (3, 0)	

### Semester VI

Code	Course	CrHr	Pre-requisite
OP3XX	Upper Limb Orthotics II	3 (2, 1)	
OP3XX	Spinal Orthotics II	3 (2, 1)	
OP3XX	Lower Limb Orthotics II	3 (2, 1)	
OP3XX	Upper Limb Prosthetics II	3 (2, 1)	
OP3XX	Lower Limb Prosthetics II	3 (2, 1)	
OP3XX	Biomechanics II	3 (3, 0)	

### Semester VII

Code	Course	CrHr	Pre-requisite
OP4XX	Biomechanics III	3 (2, 1)	
OP4XX	Lower Limb Prosthesis III	3 (2, 1)	
OP4XX	Lower Limb Orthosis III	3 (2, 1)	
OP4XX	Scientific Inquiry & Research Methodology	3 (3, 0)	
OP4XX	Workshop practices I	3 (0, 3)	
OP4XX	Clinic, Workshop & Business Management	2 (2, 0)	

### Semester VIII

Code	Course	CrHr	Pre-requisite
OP4XX	Fundamentals of Electricity & Electronics	3 (3, 0)	
OP4XX	CAD-CAM Technology	3 (2, 1)	
OP4XX	Workshop practices II	4 (0, 4)	
OP4XX	Research Project	6 (0 <i>,</i> 6)	

# Department of Management & Social Sciences

The Department of Management & Social Science is one of most accomplished and reputed department. The department provides students with a stimulating environment in which students can acquire a superior level of business, linguistics, literary, communicative, cultural and humanistic competences broad enough to make them operate in diverse walks of life quite effectively and efficiently. The Department has established a diversified academic portfolio of undergraduate programs in Business Administration, English and Psychology.

# Bachelor of Business Administration

The four years BBA program is tailored made to serve the needs of the bright young persons who have completed twelve years of education and are looking for a career education in entrepreneurship, management profession or towards higher education in business administration. This program is open to the students with diverse educational backgrounds including, humanities, science, arts and commerce. However, being a program with challenging curricula and content, it is accessible mainly to those students who have excellent academic record and high potential for success.

### **Learning Outcomes**

The students who earn the BBA degree will be able to:

- i. Communicate effectively and professionally and demonstrate the ability to create coherent written and oral statements with the diverse audience across the cultures replicating skills to analyze and synthesize information.
- ii. Demonstrate the ability to identify and evaluate relevant information for decision-making and make usage of diagnostic thinking skills and analytical techniques to assess the information and solve problems in the environment like ours characterized by uncertainty.
- iii. Understand the importance of teamwork and group dynamics in achieving organizational goals and demonstrate ability to work effectively in teams.

### Area of Specialization

- Finance
- Human Resource Management
- Marketing
- Accounting
- General Management



### **Semester Plan**

### Semester I

Code	Title	CrHr	Pre-requisite
MG111	Principles of Accounting	3	None
MG112	Principles of Management	3	None
MG113	Introduction to Business	3	None
SS114	Functional English	3	None
SS115	Islamic Studies/Ethics (for Non-Muslims)	2	None
SS116	Pakistan Studies	2	None

### Semester II

Code	Title	CrHr	Pre-requisite
MG121	Principles of Marketing	3	None
MG122	Financial Accounting	3	MG 111
SS123	Effective Writing Skills	3	SS 114
SS124	Micro Economics	3	None
CS125	Introduction to IT	3	None
MT126	Business Mathematics	3	None

### Semester III

Code	Title	CrHr	Pre-requisite
SS231	Sociology	3	None
SS232	Macro Economics	3	SS 124
MG233	Money & Banking	3	None
SS234	Business Communication	3	SS 123
CS235	E-Commerce	3	CS 125
MG236	Foreign Language-(Chines/Arabic)	3	None

### Semester IV

Code	Title	CrHr	Pre-requisite
MT241	Business Statistics	3	MT 126
MG242	Financial Management	3	MG 122
MG243	Cost Accounting	3	MG 122
SS244	Introduction to Psychology	3	SS 231
MG245	Marketing Management	3	MG 121

### Semester V

Code	Title	CrHr	Pre-requisite
MT351	Inferential Statistics	3	MT 241
MG352	Managerial Economics	3	MG 126
MG353	Human Resource Management	3	MG 112
MG354	Project Management	3	MG 112
MG355	Business & Corporate Law	3	None
MG356	Organizational Behavior	3	MG 245

### Semester VI

Code	Title	CrHr	Pre-requisite
MG361	Consumer Behavior	3	MG 112
SS362	Business Research Methods	3	MT 351
SS363	Business Ethics	3	None
CS364	Management Information Systems	3	CS 125
SS365	Economics of Pakistan	3	SS 232

### Semester VII

Code	Title	CrHr	Pre-requisite
MG471	International Business	3	None
MG472	Entrepreneurship	3	None
	Elective-1	3	Concern
	Elective-2	3	Concern
	Elective-3	3	Concern
MG 456	Research Project – I	3	

### Summer Semester at the end of year no. 3

Code	Title	CrHr	Pre-requisite
MG361	Consumer Behavior	Non Credit	None

### Semester VIII

Code	Title	CrHr	Pre-requisite
MG481	Strategic Management	3	MG 112
MG482	Production and Operations Management	3	MG 472
	Elective-4	3	Concern
	Elective-5	3	Concern
MG486	Research Project – II	3	

# **BS in English**

The BS English is 8 semesters (4 years) program offered by the department of Management and Social Sciences. As per the HEC guidelines, the curriculum has been structured around a set of compulsory courses, general courses, foundation courses, major courses, and electives courses. The BS English degree can lead to a wide range of careers. In immediate and practical terms, the students become equipped for an enormous range of careers

and postgraduate opportunities. They can go on to work in translation, teaching and academics, professional writing, arts and media, journalism, administration, public relations, leisure and tourism management, international relations, marketing. Many graduates may progress to related postgraduate courses.



# **Semester Plan**

### Semester I

Code	Course	CrHrs	Pre-Requisite
ENG101	English Structure	3	
ENG102	Introduction to Literature	3	
ENG103	Introduction to Linguistics	3	
SS118	Pakistan Studies	3	
XXxxx	General Course I	3	
XXxxx	General Course II	3	

### Semester II

Code	Course	CrHrs	Pre-Requisite
ENG104	English Communication Skills	3	ENG101
ENG105	History of English Literature I	3	
ENG106	Phonetics in English & Phonology	3	ENG101
SS108	Islamic Studies	2	
XXxxx	General Course III	3	
XXxxx	General Course IV	3	

### Semester III

Code	Course	CrHrs	Pre-Requisite
ENG201	Technical Report Writing	3	ENG104
ENG201	History of English Literature II	3	ENG105
ENG201	Introduction to Morphology and Syntax	3	
CS100	Introduction to Computers	3	
XXxxx	General Course V	3	
XXxxx	General Course VI	3	

### Semester IV

Code	Course	CrHrs	Pre-Requisite
ENG204	Advanced Academic Reading & Writing	3	ENG104
ENG205	Poetry I	3	
ENG206	Semantics & Pragmatics	3	
SS221	Human Rights and Citizenship	3	
ENG207	Prose	3	
XXxxx	General Course VII	3	

#### Semester V

Code	Course	CrHrs	Pre-equisite
ENG301	Visionary Discourse	3	
ENG302	Literary Criticism	3	
ENG303	Novel I	3	
ENG304	Drama I	3	
ENG310	Psycholinguistics	3	
ENG306	English Language Teaching	3	

#### Semester VI

Code	Course	CrHrs	Pre-Requisite
ENG401	American Literature	3	
ENG308	Drama II	3	
ENG309	Poetry II	3	
ENG405	World Literature	3	
ENG311	Stylistics	3	
SS401	Research Methodology in Literature and Linguistics	3	

#### Semester VII

Code	Course	CrHrs	Pre-Requisite
ENG307	Literary Theory	3	
ENG402	Translation Theory & Literary Studies	3	
ENG403	Novel II	3	
ENG4xx	Specialization elective 1	3	
ENG4xx	Specialization elective 2	3	

### Semester VIII

Code	Course	CrHrs	Pre-Requisite
ENG404	Critical Discourse Analysis	3	
ENG305	Sociolinguistics	3	
ENG406	Postmodern Literature	3	
ENG4xx	Specialization elective 3	3	
ENG4xx	Specialization elective 4	3	

# **BS in Psychology**

The BS English is 8 semesters (4 years) program offered by the department of Management and Social Sciences. The BS Psychology program integrates the scientific foundation of psychology with a strong background of humanities and basic sciences to better prepare students for the advanced training in psychology, medicine, cognitive science, neuroscience, and other related disciplines.

This degree can lead to a wide range of careers. They can go on to work as psychologist, advertising manager, а admission and career counsellor, child welfare psychiatrist, worker, gerontologist, market research analyst, public relations manager, social worker, speech pathologist, or numerous other occupations. Many progress to related postgraduate courses.



## **Semester Plan**

### Semester I

Code	Course	CrHrs	Pre-Requisite
SS104	English – I (Comprehension)	3	
SS118	Pakistan Studies	2	
MT100	Basic Mathematics	3	
CS100	Introduction to Computing	3	
PSY100	Introduction to Psychology	3	
XXxxx	General Elective I	3	

### Semester II

Code	Course	CrHrs	Pre-Requisite
SS203	English – II (Communication Skills)	3	SS104
SS108	Islamic Studies/Ethics	2	
MT205	Introduction to Statistics	3	
PSY102	History and Schools of Psychology	3	
XXxxx	General Elective II	3	
XXxxx	General Elective III	3	

### Semester III

Code	Course	CrHrs	Pre-Requisite
SS211	English – III (Technical Report Writing)	3	SS203
SS216	Business Law	3	
PSY201	Neurological Basis of Behavior	3	
PSY203	Personality Theories – I	3	
XXxxx	General Elective IV	3	
XXxxx	General Elective V	3	

### Semester IV

Code	Course	CrHrs	Pre-Requisite
PSY204	Introduction to Social Psychology	3	PSY101
PSY213	Personality Theories – II	3	
PSY202	Experimental Psychology	3	
PSY215	Elementary Statistics for Psychology	3	
XXxxx	General Elective VI	3	
XXxxx	General Elective VII	3	

### Semester V

Code	Course	CrHrs	Pre-Requisite
PSY301	Mental Health and Psychopathology - I	3	
PSY302	Psychological Testing – I	3	
PSY303	Research Methods in Psychology-I	3	
PSY304	Applied Statistics for Psychology	3	
PSY305	Advanced Social Psychology	3	
XXxxx	General Elective VIII	3	

### Semester VI

Code	Course	CrHrs	Pre-Requisite
PSY311	Mental Health and Psychopathology – II	3	
PSY303	Developmental Psychology	3	
PSY312	Psychological Testing – II	3	
PSY313	Research Methods in Psychology-II	3	
PSY314	Industrial Organizational Psychology	3	

### Semester VII

Code	Course	CrHrs	Pre-Requisite
PSY401	Educational Psychology	3	
PSY402	Positive Psychology	3	
PSY403	Cross Cultural Psychology	3	
XXxxx	Elective-I	3	
XXxxx	Elective-II	3	
XXxxx	Internship	3	

### Semester VIII

Code	Course	CrHrs	Pre-Requisite
PSY404	Cognitive Psychology	3	
XXxxx	Elective-III	3	
XXxxx	Elective-IV	3	
XXxxx	Research Project	6	

# **BS in Fashion & Design**

The 4-year Fashion Design degree aims at equipping graduates with a broad range of skills relevant to Fashion and Textile Design. The degree aims at developing creative ability and technical skill for designing in the fashion and textile sector for export and domestic markets. It prepares students to work in the industry and with local artisans. The strategic value adding activity makes the difference in transforming ideas into an economically viable and profitable proposition. Students develop ability to apply techniques of draping, machine sewing, pattern making, fashion drawing, technical and computer skills for woven, printing and allied industry through classroom, professional projects, and industrial training.



### **Semester Plan**

### Semester I

Code	Course	CrHrs
SS-104	English-I (Compulsory)	2(2+0)
SS -118	Pakistan Studies (Compulsory)	2(2+0)
FD-101	Basic Drawing-I	3(1+2)
FD-104	Design History & Theory-I	1(1+0)
CS-100	Intro to Computers –I / Digital Communication-I	2(0+2)
FD -102	History of Art & Culture-I	1(1+0)
FD-105	Material and Models	3(1+2)
FD-103	Shaping-I	3(1+2)

### Semester II

Code	Course	CrHrs
SS-203	English-II (Compulsory)	2(2+0)
SS-108	Islamic Studies (Compulsory)	2(2+0)
FD-201	Basic Drawing-II	3(0+3)
FD-204	Design History & Theory-II	1(1+0)
FD-202	Intro to Computers – II /Digital Communication-II	2(0+2)
FD-202	History of Art and Culture-II	1(1+0)
FD-205	Mathematics (Geometry and Drafting)	3(1+2)
FD-203	Shaping-II	3(1+2)

### Semester III

Code	Course	CrHrs
SS-211	English-III (Compulsory)	1(2+0)
FD-311	Pattern-I	2(1+1)
FD-322	Fashion Design Studio-I	2(1+1)
FD-333	Sewing-I (Machine Sewing)	1(0+1)
FD-344	Digital Fashion-I	1(0+1)
FD-355	History of Costume-I	1(1+0)
FD-307	Draping-I	3(1+2)
FD-366	Textile Basics	2(1+1)
FD-377	Human Anatomy: Drawing	1(0+1)
FD-388	Basics of Hand Sewing	1(0+1)
FD-399	Fashion Detail	2(1+1)

### Semester IV

Code	Course	CrHrs
FD-312	Mathematics of Pattern-II	2(1+1)
FD-323	Fashion Design Studio-II	3(1+2)
FD-334	Sewing-II (Machine Sewing)	1(0+1)
FD-345	Digital Fashion-II	1(0+1)
FD-356	History of Costume-II	1(1+0)
FD-308	Draping-II	3(1+2)
FD-367	Textile Design-I	2(1+1)
FD-389	Couture Finishes (Hand Sewing-II)	1(0+1)
SS-126	Foreign Language (French-I)	1(1+0)
MG-209	Marketing and Merchandising	2(2+0)

### Semester V

Code	Course	CrHrs
SS-311	English-IV	1(1+0)
FD-313	Mathematics of Pattern-III	3(1+2)
FD-324	Fashion Design Studio-III	3(1+2)
FD-335	Sewing-III (Advanced)	3(1+2)
FD-346	Digital Fashion-III	1(0+1)
FD-357	History of Costume and Fashion-III	1(1+0)
FD-309	Draping-III	3(1+2)
FD-368	Textile Design-II	2(1+1)
SS-127	Foreign Language (French-II)	1(0+1)
#### Semester VI

Code	Course	CrHrs
SS-302	English-V	1(1+0)
FD-314	Mathematics of Pattern IV	3(1+2)
FD-325	Fashion Design Studio-IV	3(1+2)
FD-336	Sewing-IV	3(1+2)
FD-347	Digital Fashion-IV (CAD / CAM)	1(0+1)
FD-358	History of Costume and Fashion-IV	1(0+1)
FD-310	Draping-IV	3(1+2)
FD-369	Textile Design-III	2(1+1)
SS-128	Foreign Language (French-III)	1(0+1)

#### Semester VII

Code	Course	CrHrs
SS-402	English-VI	1(1+0)
FD-315	Pattern-V (Grading)	3(1+2)
FD-326	Fashion Design Studio-V	3(1+2)
FD-367	Sewing-V	3(1+2)
FD-311	Draping-V	3(1+2)
FD-370	Textile Design-IV	2(0+2)
SS-129	Foreign Language (French-IV)	1(0+1)
MG-301	Costing and Planning	1(1+0)
FD-xxx	Internship	1(0+1)

#### Semester VIII

Code	Course	CrHrs
SS-403	English-VII (Dissertation)	2(2+0)
	Collection / Final Project	10



## Master of Business Administration

The MBA program aims at developing student's intellectual ability, executive personality and managerial skills through an appropriate blending of business and general education. The MBA curriculum provides students with a comprehensive management education of globally recognized best practices with flexibility of their adaptation to indigenous entrepreneurial and societal context. Core courses taught integrate information and theories from various disciplines, including communication, economics. financial accounting, quantitative methods, business strategy, marketing, finance, organizational structure and strategic management and prepare the students to think critically about business issues in order to enable them to develop strategic level understanding and demonstrate comprehension of complex theoretical constructs in the major business disciplines and technologies.

Upon completion of the program, many graduates go on to become successful entrepreneurs, or to assume leadership positions in major local and multinational corporations, in consulting firms, or in government service.

#### **Learning Outcomes**

The students who earn the MBA degree will be able to:

1. Effectively utilize various human

relation skills including leadership; oral and written communication; teamwork and collaboration.

- Demonstrate competence in applying the tools and techniques of business management, drawing on a broad—based knowledge of the major functions like accounting, economics, finance, information systems, marketing, strategy and management to solve complex business problems and make sound business decisions.
- Think critically and creatively in seeking solutions to practical and theoretical problems by using developed skills to evaluate information, solve problems, and make sound decisions.
- 2. MBA of 63 CrHr for candidates with sixteen years of non-business education.
- 3. MBA of 90 CrHr for candidates with BA/BSc/B.Com degrees or equivalent.

#### **Semester Plan**

The Campus has designed a flexible MBA program to accomodate candidates with different background qualification such as candidates with BBA four years, BA/BSc two years, etc. The following different MBA programs are available at the campus.

- four years bachelor degree in Business or equivalent.
- 1. MBA of 30 CrHr for candidates with vv3. MBA of 90 CrHr for candidates with BA/BSc/B.Com degrees or equivalent.
- 2. MBA of 63 CrHr for candidates with sixteen years of non-business education.

#### MBA - 90 CrHr (3.5 years)

#### Semester I

Code	Course	CrHrs
MG – 411	Principles of Micro Economics	3
MT – 412	Business Mathematics	3
MG – 413	Financial Accounting – I	3
MG – 414	Introduction to Management	3
MG – 415	Principles of Marketing	3

#### Semester II

Code	Course	CrHrs
SS – 421	Business Communications	3
MG – 422	Introduction to HRM	3
MG – 423	Business Finance	3
MG – 424	Financial Accounting – II	3
MG – 425	Business & Corporate Law	3

#### Semester III

Code	Course	CrHrs
CS – 511	Management Information System	3
MG – 512	Marketing Management	3
MG – 513	Principles of Macro-economics	3
MG – 514	Financial Management	3
MG – 515	Cost Accounting	3

#### Semester IV

Code	Course	CrHrs
MT – 521	Business Statistics	3
MG – 522	Consumer Behavior Analysis	3
MG – 523	Organizational Behavior	3
MG – 524	Business Research Methods	3
MG – 525	Entrepreneurship	3

#### Semester V

Code	Course	CrHrs
MG – 612	Strategic Management	3
MG – 613	General Elective*	3
MG – 614	Advance Leadership Skills and Techniques	3
MG – 615	Specialization – I	3
MG – 616	Corporate Social Responsibility	3

#### Semester VI

Code	Course	CrHrs
MG – 621	Specialization – II	3
MG – 622	International Business and Trade	3
MG – 623	Strategic Finance	3
MG – 624	Strategic Marketing	3
MG – 625	Project Management	3

#### Semester VII

Code	Course	CrHrs
MG – 711	Research Project	6

## MBA - 66 CrHr (2 - 2.5 years)

#### Semester I

Code	Course	CrHrs
MG – 511	Business Economics	3
MT – 512	Business Mathematics & Statistics	3
MG – 513	Financial Accounting – I	3
MG – 514	Introduction to Management	3
MG – 515	Principle of Marketing	3

#### Semester II

Code	Course	CrHrs
MG – 521	Research Methodology	3
MG – 522	Human Resource Management	3
MG – 523	Business Finance	3
MG – 524	Financial Accounting – II	3
MG – 525	Marketing Management	3

#### Semester III

Code	Course	CrHrs
MG – 611	Financial Management	3
MG – 612	Strategic Management	3
MG – 613	Innovation and Entrepreneurship	3
MG – 614	Organizational Behavior	3
MG – 615	Specialization – I	3

#### Semester IV

Code	Course	CrHrs
MG – 621	Specialization – II	3
MG – 622	International Business and Trade	3
MG – 623	Strategic Finance	3
MG – 624	Strategic Marketing	3
MG – 625	Project Management	3

#### Semester V

Code	Course	CrHrs
MG – 711	Research Project	6

#### MBA - 30 CrHr (1.5 years)

#### Semester I

Code	Course	CrHrs
MS – 611	Advanced Research Method	3
MS – 612	Innovation & Entrepreneurship	3
MS – 613	Strategic Management	3

#### Semester II

Code	Course	CrHrs
MS – 621	International Business & Trade	3
MS – 622	Applied Statistics in Management	3
MS – 623	Elective I	3

#### Semester III

Code	Course	CrHrs
MS – 631	Corporate Social Responsibility	3
MS – 632	Strategic Marketing	3
MS – 633	Total Quality Management	3
MS – 634	Elective II	3

#### Area of Specialization

- Management
- Finance
- Marketing
- Human Resource/Organizational Behavior
- Project Management
- Supply Chain Management
- Aviation Management

## Master of Commerce



The objective of the program is to produce capable and confident managers, entrepreneurs and academicians by providing the students with a deep analytical knowledge of the core subjects of commerce as well as sound knowledge of their areas of specialization

Duration	:	02 Years
Number of courses	:	20 Courses
Credit Hours	:	60 Credit Hours
Entry Requirements	:	14th Years of education with

at least second division.

#### **Semester Plan**

#### Semester I

Code	Title	CrHr
MCOM 500	Principles of Management	03
MCOM 501	Principles of Marketing	03
MCOM 502	Quantitative of Techniques in Business	03
MCOM 503	Managerial Economics	03
MCOM 504	Financial Accounting	03

#### Semester II

Code	Title	CrHr
MCOM 550	Research Methods in Business	03
MCOM 551	Advanced Cost and Management Accounting	03
MCOM 552	Organizational Behavior	03
MCOM 553	Financial Management	03
MCOM 554	Management Information System	03

#### Semester III

Code	Title	CrHr
MCOM 600	Human Recourses Management	03
MCOM 601	International Business	03
MCOM 602	E-Commerce	03
MCOM 603	Elective-I	03
MCOM 604	Elective-II	03

#### Semester IV

Code	Title	CrHr
MCOM 650	Operations and Production Management	03
MCOM 651	Strategic Management	03
MCOM 652	Corporate Law	03
MCOM 653	Elective-III	03
MCOM 654	Elective-IV	03

6-8 Weeks internship report/research Project and Viva Voce (03 Credit Hrs) Shall also be requirement for award of M.Com Degree.

## MS in Management Sciences

MS in Management Sciences program aims at developing a student's intellectual ability in terms of understanding the theoretical and philosophical underpinnings of modern business. The students are encouraged to explore the deepest, broadest questions of life: why we exist, how society should organize itself, how institutions should relate to society, and the purpose of human endeavor, to name just a few. The program is essentially research oriented and focuses on academic research having practical applications in real life. The program is suitable both for those who want to pursue academic career and for those who want to pursue professional career.

#### **Learning Outcomes**

The students will be able to:

- 1. Understand the theoretical underpinnings of the modern business activity.
- 2. Conduct research independently.
- Think more broadly and more deeply about the beliefs and values at the root of business activities.
- 4. Appreciate and critically evaluate different schools of thought.
- 5. Contribute towards the development of new ideas, theories and business models.

#### **Program Structure**

MS is 33 CrHr program after 16 years of relevant business education. It is research oriented degree. Although it offers different areas of specialization yet it is deemed necessary that there is a certain strategic understanding of each core functional area in order to develop integrated decision making capability. The broad structure of the program is as follows.

S.No	Category	CrHr
1	Supporting Courses	06 CrHrs
2	Core Courses	09 CrHrs
3	Elective Courses	09 CrHrs
4	Thesis	06 CrHrs
	Total	30 CrHrs

## Eligibility for non-business 16 year degree holders

The students with 16 years of non relevant education will be required to do 30 credit hours of deficiency courses before they could become eligible for admission to MS program. The following courses are recommended to be successfully completed as minimum requirement.

- 1. Financial Accounting –I
- 2. Financial Accounting ---II
- 3. Introduction to Management
- 4. Introduction to HRM
- 5. Principles of Marketing
- 6. Marketing Management
- 7. Business Finance
- 8. Financial Management
- 9. Business Economics
- 10. Business Mathematics and Statistics



#### **Core Courses**

Code	Course	CrHrs
MS502	Strategic Management	3+0
MS503	Strategic Marketing	
MS506	Strategic Finance	3+0
MS525	Advanced Project Management	3+0
MS509	HRM Strategy and Practices	3+0
MSXXX	Advance Operations Management	3+0
MSXXX	Management Science For Technical Manager	3+0
EM501	Advance Research Methods*	3+0

\* Compulsory for Thesis Students.

#### **Supporting Courses**

Code	Course	CrHrs
MS501	Advanced Research Methods & Quantitative Tools	3+0
MS516	Applied Statistics for Management	3+0

#### **Elective Courses**

Code	Course	CrHrs
MS519	Organizational Bahavior Analysis	3+0
MS520	Leadership & Motivation	
	Techniques	3+0
MS518	Investment & Portfolio	3+0
	Management	
MS517	Entrepreneurial Finance	3+0
MS413	Supply Chain Management	3+0
MS410	Advanced Quality Control	
	Techniques	3+0
MS415	Intellectual Capital Management	3+0
MS521	Organizational Learning &	
	Knowledge Management	3+0
MS411	Innovation & Entrepreneurship	3+0
MS416	Comparative Management	3+0
MS417	Global Corporate Strategy	3+0
MS522	Change Management	3+0

List of elective courses may be revised as per requirement.

## **Semester Plan**

#### Semester I

Course	CrHrs
Advanced Research Method	3
Innovation & Entrepreneurship	3
Strategic Management	3
	Course Advanced Research Method Innovation & Entrepreneurship Strategic Management

#### Semester II

Code	Course	CrHrs
MS – 621	International Business & Trade	3
MS – 622	Applied Statistics in Management	3
MS – 623	Elective I	3

#### Semester III

Code	Course	CrHrs
MS – 631	Corporate Social Responsibility	3
MS – 632	Elective II	3
	Proposal Writing	

#### Semester IV

Code	Course	CrHrs
MS – 700	Thesis	6

## MS in Engineering Management



MS in Engineering Management program is an important degree program at the university. The program is designed very carefully to cater the need of various stakeholders. The curriculum of MSEM is developed in such a way to prepare students to identify problems, provide solutions for the existing problems in commercial, financial, or other types of organizations. The main tactic of this degree program is to integrate theoretical and practical aspects of computer science discipline and its applications to various business systems. The design and use of the computer based solution to variety of problems is another major aspect to be studied during the MSEM program. The MSEM program provides students with broad range of computer knowledge and practical skills required in most of business and industry areas today.

#### Specialization

- Engineering Management
- Industrial Management

#### Program Structure

Category	CrHr	
Core Courses	15	Core courses are compulsory. A list of five core courses is designed as per the HEC criteria which will be offered to students in the first two/three semesters.
Elective Courses	09	A number of electives which are common to any specialization area of the CS discipline are identified. Student will be required to take minimum one course from this category.
Thesis	06	Intensive research to be conducted under the supervision of a faculty member.
Total	30	



#### **Core Courses**

Code	Course	CrHr
EM601	Economics and Financial Studies for Engineers	3+0
EM602	Management Science For Technical Manager	3+0
EM603	Advance Quality Control Techniques	3+0
EM605	Engineering Project Management	3+0
EM605	Engineering Systems Modelling	3+0
EM621	Decision and Risk Analysis	3+0
EM 625	Advance Operations Management	3+0
EM501	Advance Research Methods*	3+0

#### **Elective Courses**

Code	Course	CrHr
EM6XX	System Optimization	3+0
EM6XX	Reliability Engineering	3+0
EM6XX	Innovation and Entrepreneurship	3+0
EM6XX	Advanced Manufacturing Processes	3+0
EM6XX	Advanced Research Methods	3+0

List of elective courses may be revised as per requirement.

## **Semester Plan**

#### Semester I

Code	Course	CrHrs
MSEM – 611	Economics & Financial Study for Engineers	3
MSEM – 612	Engineering Management Sciences	3
MSEM – 613	Advance Research Methods	3

#### Semester II

Code	Course	CrHrs
MSEM – 621	Advanced Quality Control Techniques	3
MSEM – 622	Engineering Systems Modeling	3
MSEM – 623	Elective I	3

#### Semester III

Code	Course	CrHrs
MSEM – 711	Engineering Project Management	3
MSEM – 712	Elective II	3
	Proposal Writing	

#### Semester IV

Code	Course	CrHrs
MSEM – 722	Thesis	6

## MS in Logistic & Supply Chain Management



In today's high-tech and globally competitive world, Logistics and Supply Chain Management plays the most valuable role in business success. Industrial giants in Pakistan from every sector have not only started realizing the critical nature of this field but also have developed new departments for supply chain management.

This trend has created an immense demand of professionally-trained logistics and supply chain managers to manage supply chain processes. Job opportunities in this field are anticipated to grow in the future.

Abasyn University has ventured this program to instill such contemporary expertise required to excel in this particular field through MS Logistics and Supply Chain Management program.

#### **Program Structure**

Category	CrHr	Description	
Core Courses	15	Core courses are compulsory. A list of five core courses is provided as per the HEC criteria.	
Elective Courses	09	A number of common elective courses are identified which are useful for industrial management discipline. Students are required to take minimum three courses from this category.	
Thesis	06	Intensive research to be conducted under the supervision of a faculty member.	
Total	30		



#### **Core Courses**

Code	Course	CrHr
LM601	Logistics and Transportation Management	3+0
LM602	Supply Chain Management	3+0
LM603	Advance Quality Control Techniques	3+0
LMXXX	Management Science For Technical Manager	3+0
EM604	Supply Chain Project Management	3+0
LMXXX	Contract and Procurement Management	3+0
LMXXX	Engineering Systems modeling	3+0
LM 625	Advance Operations Management	3+0
EM501	Advance Research Methods*	3+0

#### **Elective Courses**

Code	Course	CrHr
EM6XX	Advanced Manufacturing Processes	3+0
EM6XX	Computer Integrated Manufacturing	3+0
EM6XX	Innovation and Technology Entrepreneurship	3+0
EM6XX	Advanced Operations Management	3+0
EM6XX	Advanced Research Methods	3+0

List of elective courses may be revised as per requirement.

## **Semester Plan**

#### Semester I

Code	Course	CrHr
LSM601	Economics and Financial Studies for Engineers	3+0
LSM601	Engineering Management Science	3+0
LSM601	Elective I	3+0

#### Semester II

Code	Course	CrHr
LSM601	Advanced Quality Control Techniques	3+0
LSM601	Engineering Systems Modelling	3+0
LSM601	Elective II	3+0

#### Semester I

Code	Course	CrHr
LSM601	Engineering Project Management	3+0
LSM601	Elective III	3+0
TH601	Thesis (I)	3+0

#### Semester II

Code	Course	CrHr
TH602	Thesis (II)	3+0

## MS in Project Management

MS in Project Management (MSPM) is becoming a paramount academic qualification for project managers, technical entrepreneurs, and software developers working at various levels and different professions.

Project Management enables managers to conceive, initiate, plan, execute, control and evaluate effective projects by utilizing the theoretical and practical set of skill upon which this program is focused intensively.

The degree program is purposefully designed to benefit through following curriculums adapted from PMBOK (Project Management Body of Knowledge) and beyond. Managers, GMs, Technocrats, Manufacturers, Consultants, Entrepreneurs, Engineers, Technological Experts, Scientists, and Technical Managers would find this lucrative opportunity to enhance their project management skill set.

The curriculum of MSPM is developed in such a way to equip project managers witha diversified skill set so they can comprehend a holistic design of organizational operations and their relationship to project management. Areas in strategic management, financial, marketing, and technology entrepreneurship are included in this program to expand the knowledge and value base of professionals.

#### **Program Structure**

Total number of Credit Hours and its categorical distribution:

Category	CrHr	Remarks
Core Courses	15	Corecoursesarecompulsory.A list of fivecorecourses is providedas per the HEC criteria.
Elective Courses	09	A number of common elective courses are identified which are useful for engineering management discipline. Students are required to take minimum three courses from this category.
Thesis	06	Intensive research to be conducted under the supervision of a faculty member.
Total	30	

#### Area of Specialization

- Industrial Project Management
- Engineering Project Management
- Software Project Management



#### **Core Courses**

Code	Course	CrHr
PM601	Scope and Time Management	3+0
PM602	Contract and Procurement Management	
PM603	Total Quality Management	3+0
PM606	Project Cost and Risk Management	3+0
PM605	Project Communication and HR Management	3+0
PM609	Advance Operations Management	3+0
PM604	Advanced Project Management	
PMXXX	Management Science For Technical Manager	3+0
EM501	Advance Research Methods*	3+0

#### **Elective Courses**

Code	Course	CrHr		
PM6XX	Project Stakeholders Management	3+0		
PM6XX	Innovation & Technology Entrepreneurship			
PM6XX	Financial Management in Projects	3+0		
PM6XX	Project Integration and Supply Chains Management	3+0		
PM6XX	Engineering Systems Modelling	3+0		
PM6XX	Project Stakeholders Management	3+0		
PM6XX	Research Methods for Project Management	3+0		

List of elective courses may be revised as per requirement.

\* Compulsory for Thesis Students.

## **Semester Plan**

#### Semester I

Code	Course	CrHr
PM601	Scope and Time Management	3+0
PM602	Contract and Procurement Management	3+0
EM6XX	Elective I	3+0

#### Semester II

Code	Course	CrHr
PM606	Project Cost and Risk Management	3+0
PM605	Project Communication and HR Management	3+0
EM6XX	Elective II	3+0

#### Semester I

Code	Course	CrHr
PM603	TQM in Projects	3+0
EM6XX	Elective III	3+0
TH601	Thesis (I)	3+0

Semester II

Code	Course	CrHr
TH602	Thesis (II)	3+0

## Department of Technology

Department of Technology offers 4-year B-Tech (Hons) programs in civil, electrical and mechanical technologies. Equipped with state-of-the-art laboratories and qualified faculty, the technology programs aim at providing strong practical skills with theoretical back ground to enable student to pursue successful careers in their respective fields.



## **B.Tech in Civilnology Technology**

The B. Tech Civil Technology program has been carefully designed to enable graduates to undertake planning, designing, construction, operation and maintenance of urban and rural infrastructure by applying his/her knowledge in all stages of Civil Engineering projects. The students are extensively exposed to the real-world civil engineering projects that equip them to work in an industrial environment.



## **Trimester Plan**

Code	Course	CrHr
MT101	Calculus - I	3+0
CT200	Concrete Technology	2+1
NS201	Applied Physics	3+0
CS100	Computer Fundamentals	2+1

#### Trimester II

Code	Course	CrHr
MT102	Calculus- II	3+0
SS202	Communication Skills	2+0
CT123	Surveying - I	2+1
SS120	Pak Studies	2+0
CT125	Engineering Geology	3+0

#### Trimester III

Code	Course	CrHr
CT131	Surveying- II	2+1
CT133	Material & Method of Construction	3+0
CT203	Differential Equations	3+0
SS121	Islamic Studies	2+0

#### **Trimester IV**

Code	Course	CrHr
MT211	Complex Variables & Transform	3+0
CT212	Soil Mechanics - I	2+1
CT126	Fluid Mechanics - I	3+0

#### Trimester V

Code	Course	CrHr
CT221	Theory of Structures - I	2+1
CT222	Soil Mechanics - 2	2+1
CT223	Material Testing Repair and Maintenance	2+1
CT220	Fluid Mechanics - II	3+0

#### **Trimester VI**

Code	Course	CrHr
CT231	Highway and Transportation Engineering-I	2+1
CT233	Foundation and Pavements	2+1
CT234	Theory of Structures - II	2+1
CT332	Water Supply and Waste Water Management	2+1

#### **Trimester VII**

Code	Course	CrHr
CT311	Water Supply and Waste Water Management-II	2+1
CT312	Highway and Transportation Engineering – II	2+1
CT313	Introduction to Earth quake Engineering	3+0

#### **Trimester VIII**

Code	Course	CrHr
CT321	Irrigation and Hydraulic Structure	2+1
CT322	Reinforced Concrete Structures - I	2+1
CT323	Hydrology - I	2+1

#### Trimester IX

Code	Course	CrHr
CT331	Hydrology - II	2+1
CT332	Reinforced Concrete Structures - II	2+1
CT333	Steel Structures - I	3+0
MT333	Numerical Analysis	3+0

#### Trimester X

Code	Course	CrHr
CT411	Steel Structures – II	3+0
CT412	Quantity Surveying & Contract Document	3+0
CT413	Engineering Economics	3+0

#### **Trimester XI**

Code	Course	CrHr
CT421	Industrial Training Program (ITP- 1)	0+6
CH422	Industrial Management	2+0
EH423	Engineering Drawing	0+2

#### **Trimester XII**

Code	Course	CrHr
CT431	Industrial Training Program (ITP – 2)	0+6
SS432	Technical Report Writing	2+0
CT433	Project	0+6

## **B.** Tech in Electrical Technology

The B. Tech Electrical Technology program has been carefully designed to enable graduates to undertake operation and maintenance of electrical appliances by applying his/her knowledge in all stages of electrical engineering projects. The students are extensively exposed to the real electrical engineering projects that equip them to work in an industrial environment.



#### **Trimester I**

Code	Course	CrHr
MT101	Calculus - I	3+0
ET112	Basic Electrical Technology	2+1
NS201	Applied Physics	3+0
CS100	Computer Fundamentals	2+1

#### **Trimester II**

Code	Course	CrHr
MT102	Calculus- II	3+0
SS202	Communication Skills	2+0
SS120	Pak Studies	2+0
ET125	Electronics - I	2+1
ET222	Network Analysis - I	2+1

#### **Trimester III**

Code	Course	CrHr
ET131	Electronics - II	2+1
ET132	Electrical Machine - I	2+1

## Trimester Plan

CT203	Differential Equations	3+0
SS121	Islamic Studies	2+0

#### **Trimester IV**

Code	Course	CrHr
ET200	Digital Logic and Design	2+1
ET213	Electromagnetic Field Theory	3+0
MT211	Complex Variables & Transform	3+0

#### Trimester V

Code	Course	CrHr
ET221	Network Analysis - II	2+1
ET231	Electrical Machine - II	2+1
ET332	Power Generation & Utilization	3+0
Trimester VI		

Code	Course	CrHr
ET223	Power Electronics - I	2+1
ET233	Micro Processor Theory & Interfacing	2+1
ET332	Communication Technology - I	2+1

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#### Trimester VII

Code	Course	CrHr
ET309	Power Electronics - II	2+1
ET311	Communication Technology - II	2+1
ET312	Power Transmission & Distribution - I	2+1
ET313	Measuring Instruments and Measurement	2+1

#### Trimester VIII

Code	Course	CrHr
ET320	Power Transmission & Distribution - II	2+1
ET321	Power System Analysis - I	3+0
ET322	Control Technology - I	2+1
ET323	Switch Gear & Protective Devices	2+1
CT323	Hydrology - I	2+1

#### **Trimester IX**

Code	Course	CrHr
ET331	Control Technology - II	2+1
ET332	Power System Analysis - II	3+0
ET333	High Voltage Technology - I	3+0
MT334	Numerical Analysis	3+0

#### Trimester X

Code	Course	CrHr
ET412	High Voltage Technology - II	3+0
ET413	Industrial Electronics	2+1
ET415	Project Management	3+0

#### **Trimester XI**

Code	Course	CrHr
ET421	Industrial Training Program (ITP- 1)	0+6
EH422	Industrial Management	2+0
EH423	Occupational Health Safety & environment	2+0

#### Trimester XII

Code	Course	CrHr
ET431	Industrial Training Program (ITP - 2)	0+6
SS432	Technical Report Writing	2+0
ET433	Project	0+6

## B. Tech in Mechanical Technology

The B. Tech Mechanical Technology program has been designed to enable graduates to undertake planning, designing, construction, operation and maintenance of mechanical appliances by applying his/ her knowledge in all stages of mechanical engineering projects. The students are extensively exposed to the real-world mechanical engineering projects that equip them to work in an industrial environment.

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#### **Trimester Plan**

#### **Trimester I**

Code	Course	CrHr
MT101	Calculus - I	3+0
MT114	Machining Processes	2+1
NS201	Applied Physics	3+0
CS100	Computer Fundamentals	2+1

#### Trimester II

Code	Course	CrHr
MT102	Calculus- II	3+0
SS120	Pak Studies	2+0
MT123	Mechanics of Materials	2+1
MT126	Fluid Mechanics - I	2+1
SS202	Communication Skills	2+0

#### **Trimester III**

Code	Course	CrHr
MT131	Applied Thermodynamics	2+1
MT132	Fluid Mechanics - II	2+1
CT203	Differential Equations	3+0

#### SS121 Islamic Studies

#### **Trimester IV**

Code	Course	CrHr
MT200	Manufacturing Processes - I	2+1
MT201	Workshop Technology	0+1
MT211	Complex Variables & Transform	3+1
MT212	Machine Design - I	2+1

2+0

#### **Trimester V**

Code	Course	CrHr
MT221	Industrial Materials	3+0
MT222	Machine Design – II	2+1
MT223	Manufacturing Processes – II	2+1

#### **Trimester VI**

Code	Course	CrHr
MT231	Solid Mechanics - I	2+1
MT233	Plant Maintenance	2+0
MT332	IC Engines - I	2+1
Trimester VII		

# CodeCourseCrHrMT311IC Engines- II2+1MT312Mechanical Vibration - I2+1MT313Solid Mechanics - II2+1

#### **Trimester VIII**

Code	Course	CrHr
MT321	Production Planning and Control	3+0
MT322	Material Handling- I	2+0
MT323	Metrology and Gauging	2+1
MT324	Mechanical Vibration - II	2+1

#### Trimester IX

Code	Course	CrHr
MT331	Material Handling – II	2+0
MT332	Energy and Environmental Technology	3+0
MT333	Production Automation - I	2+1
MT334	Numerical Analysis	3+0

#### **Trimester X**

Code	Course	CrHr
MT411	Auto Cad	0+2
MT412	Engineering Mechanics	3+0
MT413	Instrumentation & Control - I	2+1
MT415	Production Automation – II	2+1

#### **Trimester XI**

Code	Course	CrHr
MT413	Instrumentation & Control - II	2+1
MT421	Industrial Training Program (ITP- 1)	0+6
MH422	Industrial Management	2+0
EH423	Occupational Health Safety & environment	2+0

#### **Trimester XII**

Code	Course	CrHr
MT431	Industrial Training Program (ITP-2)	0+6
SS432	Technical Report Writing	2+0
MT433	Project	0+6

## Department of Mathematics and Statistics

Mathematics and statistics are exciting and challenging subjects and have numerous applications in all the fields of science, engineering, computing and social sciences. The department aims to pursue excellence in mathematics and statistics through quality teaching and research. The department not only offers undergraduate programs in mathematics and statistics but also offer mathematics and statistics courses in different degree programs at the campus.

## **BS in Mathematics**

We strive to make an impact on the discipline of Mathematics and Statistics and on the broader community through the following goals:

To be a resource in the Mathematical and Statistical sciences for other disciplines whose own activities have an everincreasing need for the power of theMathematics and Statistics?

To work closely not only with colleagues from other discipline within Abasyn University but also with colleagues from the local schools and community colleges who share the responsibility of ensuring the flow of a mathematically literate and confident generation of new students.

To embrace the notion such that change such as is manifested in computer technologies and educational reforms can be beneficial enhance learning and enrich the intellectual environment.

#### **Semester Plan**

#### Semester I

Code	Course	CrHr	Pre-requisite
MT-111	Calculus-1	3(3-0)	
ST-111	Introduction to Statistics(GC)	3(3-0)	
SS-104	English-I(Comprehension)(CC)	3(3-0)	
CS-100	Introduction to Computing (CC)	3(2-1)	
ECO-101	Introduction to Economics (GC)	2(3-0)	
SS-118	Islamic Studies/Ethics (CC)	2(2-0)	

#### Semester II

Code	Course	CrHr	Pre-requisite
MT-121	Calculus –II	3(3-0)	
MT-122	Linear Algebra	3(3-0)	
NS-101	Applied Physics-I (GC)	4(3-1)	
CS-106	Introduction to Computer Programming(GC)	4(3-1)	
HS-118	Pakistan Studies(CC)	2(2-0)	

#### Semester III

Code	Course	CrHr	Pre-requisite
MT-211	Calculus-III	3(3-0)	
MT-212	Advanced Linear Algebra	3(3-0)	
MT-213	Mathematical Thinking(CC)	3(3-0)	
MT-214	Computing Tools for Mathematics(GC)	2(1-1)	
NS-210	Applied-Physics-II(GC)	4(3-1)	
SS-203	English-II(Communication Skills)(CC)	3(3-0)	

#### Semester IV

Code	Course	CrHr	Pre-requisite
MT-221	Real Analysis	3(2-1)	
MT-222	Introduction to Topology	3(2-1)	
MT-223	Ordinary Differential Equation	3(2-1)	
SS-218	Intro to Sociology/Intro to Philosophy (GC)	3(2-1)	
SS-211	English-III(Technical Report Writing)(CC)	3(2-1)	
MT-224	Elements of Set theory and Mathematical Logic(CC	2(2-0)	

#### Semester V

Code	Course	CrHr	Pre-requisite
MT-311	Functional Analysis	3(3-0)	
MT-312	Complex Analysis	3(3-0)	
MT-313	Partial Differential Equations	3(3-0)	
MT-314	Group Theory	3(3-0)	
MT-315	Numerical Methods	3(3-0	

#### Semester VI

Code	Course	CrHr	Pre-requisite
ST-311	Probability Distribution 11	3(3-0)	
ST-312	Sampling Technique 11	4(3-1)	
ST-313	Design & Analysis of Experiment 11	4(3-1)	
ST-314	Econometrics	3(3-0)	
SS-xxx	Elective 1	3(3-0)	

#### Semester VII

Code	Course	CrHr	Pre-requisite
MT-411	Numerical Analysis	3(3-0)	
MT-412	History of Mathematics	3(3-0)	
MT-413	Measure Theory	3(3-0)	
MT-414	Control Theory	3(3-0)	
MT-xxx	Final year Project Or Elective Course	3(3-0)	

#### Semester VIII

Code	Course	CrHr	Pre-requisite
MT-xxx	Elective – 1	3(3-0)	
MT-xxx	Elective – 2	3(3-0)	
MT-xxx	Elective – 3	3(3-0)	
MT-xxx	Elective – 4	3(3-0)	
MT-xxx	Final year Project OR Elective Course	3(3-0)	

## **BS in STATISTICS**

We strive to make an impact on the discipline of Mathematics and Statistics and on the broader community through the following goals:

To be a resource in the Mathematical and Statistical sciences for other disciplines whose own activities have an everincreasing need for the power of theMathematics and Statistics?

To work closely not only with colleagues from other discipline within Abasyn University but also with colleagues from the local schools and community colleges who share the responsibility of ensuring the flow of a mathematically literate and confident generation of new students.

To embrace the notion such that change such as is manifested in computer technologies and educational reforms can be beneficial enhance learning and enrich the intellectual environment.

### Semester Plan

#### Semester I

Code	Course	CrHr	Pre-requisite
MT-112	Calculus-1 (COMP)	3(3-0)	
ST-101	Introduction to Statistics(GC)	3(3-0)	
SS-104	English-I(Comprehension)(COMP)	3(3-0)	
CS-100	Introduction to Computing (COMP)	3(2-1)	
ECO-101	Introduction to Economics (GC)	2(3-0)	
SS-118	Islamic Studies/Ethics (COMP)	2(2-0)	

#### Semester II

Code	Course	CrHr	Pre-requisite
MT-114	Calculus –II(COMP)	3(3-0)	
MT-201	Discrete Mathematics (GC)	3(3-0)	
SS-330	Business Ethics (GC)	3(3-0)	
ST-112	Introduction to Probability	3(3-0)	
MT-221	Linear Algebra	3(3-0)	
HS-118	Pakistan Studies(COMP)	2(2-0)	

#### Semester III

Code	Course	CrHr	Pre-requisite
MT-211	Calculus-III(COMP)	3(3-0)	
ST-201	Basic Statistical Inference	3(3-0)	
ST-202	Operational Research	3(3-0)	
SS-203	English11(Communication Skills) (COMP)	3(3-0)	
SS:xxx	International Relation(GC)	3(3-0)	

#### Semester IV

Course	CrHr	Pre-requisite
stics	3(3-0)	
ession Analysis and Experimental Design	3(3-0)	
Analysis 1	3(3-0)	
ology/Introduction to Philosophy (GC)	3(3-0)	
echnical Report Writing) (COMP)	3(3-0)	
nagement (GC)	3(3-0)	
	stics ession Analysis and Experimental Design Analysis 1 blogy/Introduction to Philosophy (GC) echnical Report Writing) (COMP)	CourseCrffastics3(3-0)ession Analysis and Experimental Design3(3-0)Analysis 13(3-0)blogy/Introduction to Philosophy (GC)3(3-0)echnical Report Writing) (COMP)3(3-0)anagement (GC)3(3-0)

#### Semester V

Code	Course	CrHr	Pre-requisite
ST-301	Probability Distribution 1	3(3-0)	
ST-303	Sampling Technique 1	4(3-1)	
ST-304	Design & Analysis of Experiment 1	4(3-1)	
ST-302	Regression Analysis	3(3-0)	
SS-xxx	vvEntrepreneurship(GC)	3(3-0)	

#### Semester VI

Code	Course	CrHr	Pre-requisite
ST-311	Probability Distribution 11	3(3-0)	
ST-312	Sampling Technique 11	4(3-1)	
ST-313	Design & Analysis of Experiment 11	4(3-1)	
ST-314	Econometrics	3(3-0)	
SS-xxx	Elective 1	3(3-0)	

#### Semester VII

Code	Course	CrHr	Pre-requisite
ST-401	Applied Multivariate Analysis	3(3-0)	
ST-402	Time Series Analysis	3(3-0)	
ST-403	Statistical Inference 1	3(3-0)	
ST-xxx	Elective – 2	3(3-0)	
ST-xxx	Final year Project OR Elective Course	3(3-0)	

#### Semester VIII

Code	Course	CrHr	Pre-requisite
ST-411	Statistical Inference 11	3(3-0)	
ST-412	Statistical Package	3(2-1)	
ST-xxx	Elective –3	3(3-0)	
ST-xxx	Elective –4	3(3-0)	
ST-xxx	Final year Project OR Elective Course	3(3-0)	

## Bachelor of Science in Mass Communicationt

The Department of Mass Communication, encompasses a wide variety of disciplines, starting from the basic perspectives of the field of Mass Media and Communication and moving onto explore each area of the discipline through broad exposure to industry and practical assignments along with added emphasis on media research methods. The focus is on analytical and historical perspectives. The program develops in students the ability to assess the roles and effects of mass media on society and life, and helps them gain specific media production skills through extensive practical work. The program starts by developing a fundamental understanding of the subject in students by teaching them about the history, values and structure of mass communication in Pakistan and abroad. Students are then trained to analyses the effects of electronic and print media in order to enable them to evaluate media effects on public policy, as well as the impact of public policy on the media. In addition to core courses, students must take some approved media methods/ research courses in social sciences and a number of electives offered in other disciplines such as Anthropology, Sociology, Political Science, Linguistics and Journalism.

#### Semester Plan

#### Semester I

	Course
1	Introduction to Mass Communication
2	Functional English–I
3	Islamic Studies
4	Computers Skills for Mass Communication
5	Psychology*
6	Political Science

#### Semester II

	Course
1	Mass Media in Pakistan
2	News Writing (English/Urdu)
3	Writing & Presentation Skills (English–II)
4	Pakistan Studies
5	Functional Urdu**
6	Sociology***

#### Semester III

Course	
1	Broadcast Journalism (TV & Radio)
2	Editing News/Copy Editing (English/Urdu)
3	Current Affairs
4	Communication Skills (English –III)
5	Economics
6	Optional Subject(Other Disciplines) –I

#### **Semester IV**

	Course
1	Reporting & Editing Workshop(English/Urdu)
2	Media Ethics and Law
3	Introduction to Film & Theater Studies
4	Optional Subject (Other Disciplines)–II
5	Optional Subject (Other Disciplines)- III
Semester V	
	Course
1	Feature, Column & Editorial Writing
2	Communication Theories-II
3	Foundation of Behavioral Research–I
4	Media seminar*

#### Semester VI

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- 1 Introduction to Advertising and PR
- 2 Online journalism
- 3 Communication Theories-I
- 4 Contemporary World Media
- 5 Optional (Foundation)- I

#### Semester VII

#### Course

- 1 Foundation of Behavioral Research-II
- 2 Development Communication/DSC
- 3 Internship
- 4 Specialized Sequence Subject-I
- 5 Specialized Sequence Subject-II

#### Semester VIII

#### Course

- 1 International Communication
- 2 Final project/Research Report/Res. Article
- 3 Optional (Foundation)-II
- 4 Specialized Sequence Subject-I
- 5 Specialized Sequence Subject-II

## PhD Programs



#### Introduction

This section presents details related to PhD program offered by the University. The information in this section is very brief but useful for students to plan their PhD programs. Students will be provided additional information by their respective Departments and Supervisors. All students begin their PhD studies with the status of "admitted to the PhD program". Continuation in the PhD program requires that the student perform satisfactorily during various stages such as course work, comprehensive and thesis proposal defence. Finally, admission to candidacy requires that the student demonstrate evidence of research ability on the thesis proposal defense conducted by the University. The key program activities are expected to complete as per HEC guidelines for PhD program.

#### Admission to the PhD Program

Abasyn University offers admission to its PhD program on the basis of open merit. Admission to PhD program is offered in the Fall and Spring Semesters. However, under special circumstances a candidate may submit his/her application to the University any time during the academic year. The Graduate Studies and Research Management Council (GSRM) is the final authority to verify and confirm PhD admission.

#### General Criteria and Procedure for Admission

Candidates seeking admission in PhD program have to fulfill certain requirements depending on their respective field of study. The final evaluation of students seeking admission in PhD program will be done by GSRM on case to case basis. However, all applicants are required to meet the following eligibility criteria for direct PhD admission:

- A minimum of eighteen years of education resulting in a Masters or M.Phil degree with thesis option from an HEC recognized University.
- 3.0/4.0 Cumulative GPA in semester based system or First Division in the annual based system or equivalent.
- NTS/GRE/GMAT/IAT (Abasyn Admission Test) –
  - NTS 60 or above accumulative score or
  - o GRE General Score

The score level will be determined by the GSC.

o GRE Subject Test—As per department requirement

or (if applicable)

 Abasyn Aptitude Test (AAT) – 70% score (Note: If the Test is not available in NTS subject list, then a University Committee consisting of at least 3 PhD faculty members in the subject area will conduct an AAT for the applicants).

#### Procedure to apply for the PhD

A candidate will apply for admission in a PhD program using Application form available for this purpose. A personal research statement will also be submitted by the student along with the application form. The admission committee or the admission office will thoroughly scrutinize the application form and send the research statement to the relevant Department. If the Admission Office and the concerned Department are satisfied with the qualification and suitability of the candidate then the applications of all candidates will be sent to the GSRM for final approval.

#### **Transfer Cases**

AU accepts transfer students into Ph.D. program. However, the university or program from which a student intends to transfer should be HEC recognized university or program. The courses already studied by the candidate will be evaluated by the PhD admissions committee at the department level. The concerned department will submit candidate's application for transfer along with the accepted courses to Graduate Studies and Research Management Council (GSRMC) for final approval. However, HEC's rules will be strictly followed in this regard and not more than 50% courses will be transferred. Results of Comprehensive exam, proposal defense or any other related examination will not be transferred.

#### PhD Program: Credit Hours Distribution

A PhD candidate is required to complete 48 credit hours which are distributed in the following manner:

 Minimum 18 CrHr course work for students who are enrolled in direct PhD program. • PhD Thesis of 30 CrHr

The 18 CrHr course work is distributed as follows:

• Two Core or Compulsory courses (6 CrHr):

A PhD student will be required to take two core courses. The two core courses will be offered from the list of approved core courses for the program in which the student is enrolled.

Four elective courses (12 CrHr) from the area of Specialization:

In addition to two core courses, four elective courses will be offered from the approved list related to area of specialization of the student.

Note: In some cases (if suggested by the supervisor or PhD advisory committee) a PhD student may require to take courses from the support areas such as Math, Research Methods, etc.

## Structure and duration of PhD program

The normal duration of the PhD degree is three year; however, a student may be granted extension after approval by the PAC behind the normal period.

The overall structure and duration of the PhD degree is presented in the table below.



#### **Course Work – Comprehensive Examination**

Thesis Proposal/ Thesis/ Thesis Defense

of the PAC.

Year 1	Year 2	Year 3	Year 4
Semester – I	Semester – I	Semester – I	Semester – I
Core Course no. 1 Core Course no. 2 Allocation of the PhD Supervisor.	Specialization/ Support area course no. 3 Specialization/ Support area course	Work on thesis Registration for 10 CrHr Thesis Semester – II	Work on thesis Student will be registered as thesis write-up student with no CrHr hrs in this period.
Specialization/ Support area course no. 1 Specialization/ Support area course no. 2	Comprehensive Examination Semester – II Work on Thesis Proposal – Student must be registered for 10 CrHr Thesis Thesis Proposal Defense	Registration for 10 CrHr Thesis Thesis Defense (if thesis is not completed in the speculated period PAC can grant extension for one year to enable student to complete his/her thesis).	Thesis Defense (if thesis is completed), otherwise thesis write-up status will continue to next semester Semester – II Work on thesis Thesis defense In case thesis is not completed, further extension will only be granted by the COUNCIL after the recommendation

Note: Student may take courses during summer semester (if available).



#### Financial and Assistantship

The University believes in promoting research culture in the country; therefore, maximum support is provided to PhD scholar to financially support their studies at the AU. Further, AU admits students purely on merit basis, regardless of their financial status. PhD students after the completion of course work may be involved in teaching undergraduate level courses in order to provide them financial support from the University.

The following schemes of fee waiver or

discount are available at the AU:

- Qarza-e-Hasna
- Assistantship in the form of Research Fellow, Teaching Assistant, Lab Assistant.
- Fee discount for student with research experience, journal publication and bright academic record.
- Assistantship through industrial projects (if available and subject to the approval of the Project Investigator)
- Students can also obtain grants from other organizations such as HEC, ICT R&D fund and Ministry of IT (if available).

Admission fee	Rs. 20,000/- (one time)
Tuition fee	Rs. 75,000/- per semester (2 sem in year)
Registration and other charges	RS. 10,000/- per semester
Library and Laboratory Security (refundable)	Rs. 25,000/- (For Life Sciences, Computing and Engineering)
Total for the first year	Rs. 180,000/-
Total for the 2nd and 3rd year	Rs. 160,000/-
Continuation fee behind 3rd year	Rs. 75,000/-

The breakdown of the Tuition and other financial charges is as follows:

#### Evaluation of thesis by expert from Technological

Fee for two foreign Evaluators from Technology Advanced countries	\$600/- (one time)
Final Examination and Internal Review fee	Rs. 50,000/- (one time)

\* Rupees 10,000/- per credit hour will be charged in Summer Semester (if required)



## **Faculty Members**

#### Abasyn University, Islamabad Campus



#### Dr. Amjad Mahmood

Professor/Executive Director

- PhD (Computer Science), University of London, UK
- MSc (Computer Science) Quaid-e-Azam University, Pakistan
- B.Sc (Mathematics & Physics) University of Punjab, Pakistan



#### Dr. Muhammad Noman Jafri

Professor/Dean Engineering & Computing

- PhD (Electrical Engineering), University of Ottawa, Canada
- MSc (Electrical Engineering), University of Ottawa, Canada
- BSc (Hons.) (Electrical Engineering), West Pakistan UET, Lahore



#### Dr. M. Zaheer Akhter

Professor

- PhD (Education) University of Arid Agriculture, Rawalpindi, Pakistan.
- MS (Management) Arthur D' little Management Education Institute, Cambridge, Massachusetts, USA.
- MA (Public Administration), Punjab University, Lahore, Pakistan.



#### Dr. Muhammad Yousaf Khan

Associate Professor

- PhD (Software Engineering) Abertay University, Dundee, Scotland, UK.
- M.Phil (Software Engineering) Computer Science, Abertay University, Dundee, Scotland, UK.
- BSc (Hons) Computer Technology, Teesside University, Middlesborough, UK.
- BSc (Pass), Karachi University, Pakistan.



#### Dr. Nadeem Anwer

Professor/HoD Civil Engineering

- PhD Transportation Engineering, National University of Science & Technology (NUST)
- MSc Transportation Engineering, National University of Science & Technology (NUST)
- BE Civil Engineering. National University of Science & Technology (NUST)



#### DR. Ali Arshad

#### Assistant Professor

- Ph.D. (Computer Science & Technology) XIDIAN University, XI AN, P.R.China.
- BE Electrical Engineering. Air University.
- MS (Software Engineering) International Islamic University Islamabad.
- BS (Computer Science) Iqra University Islamabad Pakistan.



#### Dr. Iffat S. Chaudhry

Assistant Professor (on leave)

- Ph.D (Management), Hull University, UK.
- MBA Executive (Marketing), University of South Asia, Lahore, Pakistan.
- BSIT (Information Systems), Preston University, Ajman, UAE.
- Higher Diploma in Software Engineering, Aptec Centre, Sharjah, UAE.



#### Dr. Muhammad Akhlaq Mughal

Assistant Professor/HoD Pharmacy

- PhD (Pharmaceutical sciences) University of Peshawar-University of the Sciences in Philadelphia, Philadelphia, PA (USA).
- B.Pharmacy, University of Peshawar, Pakistan.



#### Dr. Fariha Masood

**Assistant Professor** 

- PhD (Bio Sciences) Comsats University, Islamabad Pakistan
- MPhil (Bio Technology) Quaid-i-Azam University, Islamabad, Pakistan.
- BSc (Zoology, Botany , Chemistry ), Pakistan



#### **Dr. Ch. I. Zafar** Assistant Professor

- Ph.D. (IT), PIMSAT Karachi, Pakistan.
- M.Sc (Digital Electronics (Radio and Communications Engineering)), Kings College London, University of London, UK.
- B.Sc Engineering (Electronics), UET, Taxila, Pakistan.



#### Dr. Waqar Ahmed Malik

Assistant Professor / HoD Electrical Engineering

- PhD Electrical Engineering (RF & Microwave ) King Saud University, KSA
- MS (Radio System Eng.) The University of Hull, Uk
- BS Electrical Engineering , Pakistan



#### Dr. Zeshan Alam Assistant Professor

- Ph.D (Structural Engineering) Westren Sydney University, Australia.
- MS (Structural Engineering) NUST
- BS (Civil Engineering) UET , Peshawar



#### Engr. Wasif Latif

Assistant Professor

- MS (Telecommunications & Networks) Iqra University, Islamabad, Pakistan.
- BSc (Hons) (Electrical Engineering) UET Taxila, Pakistan.



#### **Engr. Yasir Javed** Assistant Professor

- MS (Computer System Engineering) CASE, UET Taxila, Pakistan.
- BS (Computer System Engineering) NUST, Pakistan.



#### Ms. Khola Ilyas

Assistant Professor / HoD Management & Social Science

- MS (MGT) Iqra University, Islamabad, Pakistan
- MBA (International Islamic University), Islamabad, Pakistan
- BBA (University of Punjab), Islamabad ,Pakistan



#### **Mr. Abdul Hannan** Assistant Professor

- Phd (Computer Sciences) Abasyn University, Islamabad. (In progress)
- MS (Computer Science) Iqra University, Islamabad, Pakistan.
- BS (Software Engineering) Foundation University, Islamabad, Pakistan.



#### Mr. Muhammad Idrees

Assistant Professor

- Phd Scholar, COMSATS Institute of Information Technology, Islamabad
- MS (Applied Mathematics) NED University of Engineering and Technology, Karachi, Pakistan.
- MSC (Applied Mathematics) University of Karachi, Pakistan.


## Mr. Muhammad Rashid

Assistant Professor

- M.Phil (Pharmacology) University of Sargodha, Pakistan.
- Doctor of Pharmacy, University of Malakand, K.P.K, Pakistan.



#### Mr. Abdul Basit Assistant Professor

- Ph.D (Wirless Communication in Femtocells) (in progress) Iqra University, Islamabad, Pakistan.
- M.S (Telecomunication) Iqra University Karachi, Pakistan.
- M.Sc (Mathematics) Hazara University, Mansehra, Pakistan.



#### Engr. Naheed Akhtar Assistant Professor

- MS (Civil Engineering) UET, Taxila, Pakistan.
- BS (Civil Engineering) UET, Taxila, Pakistan.



#### Engr. Khan Shahid Kamal Khan Assistant Professor

- M.Sc (Construction Engineering and Management) NUST, Pakistan.
- B.Sc (Civil Engineering) UET, Taxila, Pakistan.



#### **Ms. Laila Khalid** Assistant Professor

- MSc (Civil Engineering ) NUST, Islamabad , Pakistan
- BSc (Civil Engineering) BZU Multan, Pakistan



#### **Dr. Laila Jafri** Assistant Professor

- PhD (Biochemistry/Molecular Biology) QAU Islamabad Pakistan
- M Phil (Biochemistry / Molecular Biology)QAU Islamabad Pakistan
- Master of Biochemistry , University of Agriculture Faisalabad , Pakistan



#### Ms. Naila Abbasi Assistant Professor

- M.Phil (Pharmacology) University of Balochistan Quetta University.
- Pharm-D (Doctor of Pharmacy) University of Punjab.



#### **DR. Sidra Noor** Assistant Professor

- Ph.D. (Pharmacy) University of Peshawar.
- Pharm-D (Doctor of Pharmacy) University of Peshawar.



## Dr. Fouzia Nahid

Assistant Professor

- Ph.D (Microbiology) Quaid e Azam University Islamabad
- M.Phil (Microbiology) Quaid e Azam University Islamabad
- Pham-D (Doctor of Pharmacy) Riphah International University
  Islamabad Pakistan.



## Engr. Aisha Qamar

Lecturer

- MS (Electrical Engineering) NUST College Of Electrical & Mechanical Engineering (CEME), Pakistan.
- BS (Electronic Engineering) Institute: International Islamic University Islamabad, Pakistan.



#### Ms. Rabaila Riaz

Lecturer

- MS (Biotechnology) Balochistan University, Pakistan.
- BS (Biotechnology) Balochistan University, Pakistan



## Ms. Rashida Khalid

- MS (Electrical Engineering) COMSATS, Islamabad, Pakistan.
- BS (Electrical Engineering) NFC, Faisalabad, Pakistan.



## Mr. Shahzaib Iqbal

Lecturer

- MS (Electrical Engineering) Abasyn University, Pakistan.
- BSc (Electrical Engineering (Telecom)), COMSATS Institute of Information Technology, Wah Cantt, Pakistan.



#### Mr. Bin Amin Lecturer

- M.Phil. Microbiology, Abasyn University Islamabad
- M.Sc. Microbiology, Abasyn University Islamabad
- BSc MLT, Hazara University



#### Mr. Roman Khan

Lecturer

- MBA, Quaid-e-Azam University, Islamabad, Pakistan.
- BBA (Hons) Islamia College, Peshawar, Pakistan.



## Ms. Naveen Ahmed

Assistant Professor

- MS (Software Engineering) NUST, Pakistan.
- BS (Software Engineering) International Islamic University, Islamabad, Pakistan.



#### Mr. Muhammad Wasim

- Pharmaceutical Chemistry, Master of Philosophy (M. Phil) Riphah International University, Islamabad, Pakistan.
- Doctor of Pharmacy (Pharm-D) University of Malakand. Malakand, Pakistan.



#### Ms. Tabinda Azim Lecturer

- M.Phil. (Pharmacology) University of Sargodha, Pakistan.
- B-Pharmacy, Islamia University, Bahawalpur, Pakistan.



#### Ms. Anum Umair Lecturer

- MPM (Project Management) Szabist, Islamabad, Pakistan
- BBA (Hons.), COMSATS, Islamabad, Pakistan



#### Mr. Allah Nawaz Khan Lecturer

- MS (Microbilolgy and Immunology) COMSATS IIT Islamabad, Pakistan.
- BS. (Hons) (Biotechnology) U.S.T Bannu, Pakistan.



#### Mr. Imran Arshad

Lecturer

- Post Professional Doctor of Physical Therapy (PPDPT), Riphah International University Islamabad Pakistan.
- Bachelor of Science Physiotherapy (BSPT) Riphah International
   University Islamabad Pakistan.



#### Engr. Kamran Qureshi

- MS (Electronics Design) Mittuniversitetet (Mid-Sweden University), Sweden.
- BS (Telecommunication Engineering) National University of Computer and Emerging Sciences, FAST-NU, Pakistan



#### Mr. Furqan Saeed

Lecturer

- MBA, Bahria University Islamabad, Pakistan.
- B.Com (Information Technology) GIFT University, Gujranwala, Pakistan.
- Diploma (Business Administration) Liverpool College of Management, London.



#### Ms. Sobia Raja Lecturer

- PhD (Management) Comsats University, Wah , Pakistan (In Process)
- Ms (General Management) Comsats University, Wah , Pakistan
- BBA (HRM) University of WAH Pakistan



#### Ms. Ulfat Batool Lecturer

- Lecturer
- MSOMPT , Riphah International University, Pakistan
- DPT (Doctor of Physical Therapy) Isra University Islamabad, Pakistan



#### Ms. Madiha Hena

Lecturer

- MS (Telecommunication and Networks) Abasyn University, Islamabad.
- BS (Telecommunication and Networks) Iqra University, Islamabad.



#### Ms. Bazla Siddique Lecturer

- M.Phil (Pharmacy) Quaid-i-Azam University Islamabad Pakistan.
- DPT (Doctor of Pharmacy) Quaid-i-Azam University Islamabad Pakistan.



#### Ms. Sara Ghazal

- M.Phil. (Clinical Psychology) Foundation University Rawalpindi .
- Master of Behavioral Sciences, Fatima Jinnah Women University.
- BS Psychology, Virtual University of Pakistan.



#### Ms. Ammara Sarfaraz

Lecturer

- M.Phil. English (Linguistics and Literature), COMSATS University Islamabad
- Masters in English, Air University Islamabad
- Bachelor of Arts, University of the Punjab Lahore



## Ms. Nazma Namroz

Lecturer

- MS Orthopaedics Manual Physical Therapy (OMPT), Riphah International University Islamabad Pakistan.
- DPT (Doctor of Physical Therapy) Isra University Islamabad, Pakistan.



#### Mr. Ateeq Khalid

Lecturer

- MS (Project Management) Riphah International University Islamabad Pakistan.
- Bachelor of Technology (Civil) Sarhad University of Science & IT Peshawar.



## Ms. Narmeen Hanif

Lecturer

- MS (Clinical Psychology) Bahria University Islamabad Campus.
- BS in (Psychology) Islamic International University Islamabad.



#### Ms. Sana Khalid Lecturer

- MS (English-Linguistics & Literature) COMSAT Islamabad Pakistan.
- MA (English-Linguistics & Literature) NUMAL University Islamabad.



#### Ms. Saleha Shakir

Lecturer

- MS English (Literature) Riphah International University Islamabad Pakistan.
- Bs English (Language & Literature Balis) Postgraduate College For Women
   PAF



#### **Mr. Jawad Naveed**

Lecturer

- Post Professional Doctor of Physical Therapy (PPDPT), Riphah International University Islamabad Pakistan.
- Bachelor of Science Physiotherapy (BSPT) Armed Forces Post Graduate Medical Institute Rawalpindi.

#### Ms. Maria Razzaq

Lecturer

- Masters in Cardiopulmonary Physical Therapy (MSCPPT) Riphah Collage Rawalpindi.
- Doctor of Physical Therapy (DPT), Riphah International University Islamabad Pakistan.



#### Ms. Kanwan Batool

Lecturer

- MS Software Engineering (FAST-NUCES,) Islamabad, Pakistan.
- BS Software Engineering International Islamic University Islamabad.



## Mr. Muhammad Farrukh Bashir

Lecturer

- MS Computer Science (FAST-NUCES,)Islamabad, Pakistan.
- Bs Computer Science COMSAT University Islamad



#### Mr. Masood Shahbaz Shoukat Lecturer

- MS (Mathematics) International Islamic University Islamabad.
- Bs (Mathmetics) International Islamic University Islamabad.



#### Mr. Gul badin

Lecturer

- M.Sc (Transportical Engineering) UET Taixla Pakistan.
- B.Sc (Civil Engineering) UET Taxla Pakistan.



#### Mr. Imdad ul Khan Lecturer

- MS (Structural Engineering) NUST Islamad Pakistan
  - BS (Civil Engineering) UET Peshawar Pakistan



## Mr. Waqar Ahmad

Lecturer

- M.Phil (Pharmacognosy) Quaid e Azam University Islamabad
- Pharm-d (Pharmacognosy) Sawabi University.



#### Mr. Ali Nasir

Lab Engineer

• BS (Civil Engineering) UET Lahore, Pakistan.



#### Mr. Muhammad Usman Ghani

Lab Enginner

- MS (Engineering Management) NUST, Islamabad, Pakistan. (In Progress)
- BS (Civial Engineering) University of Lahore Islamabad Campus Pakistan.



## Mr. Asad Hanif

Junior Lecturer

- MS (Computer Science) Abasyn University, Islamabad, in Progress.
- BS (Telecommunication & Networks) Iqra University, Islamabad, Pakistan.



#### Mr. Waqar Ali

- MS (Computer Science) Comsats University Islamabad, Pakistan.
- BS (Computer science) Comsats University Islamabad, Pakistan.



## Mr. Muhammad Asif Zaman

Junior Lecture

- MS (Mechanical Engineering) CUST, Islamabad, Pakistan.
- B.Tech (Hons) Mechanical Sarhad University of Science & Information
  Technology



#### Mr. Ali Tarique

Junior Lecture

- MS (Construction Engineering and Management) NUST Pakistan.(In Progress)
- BS (Civil Engineering) COMSAT Pakistan



#### Mr. Sana ur Rehman

**Junior Lecture** 

BS (Mechaincal Engineering) International Islamic University
Islamabad Pakistan.



#### Mr. Asim ul Haq

Lab Engineer

- MS (Electrical Engineering) Comsats University, Islamabad, Pakistan.
- BS (Electrical Engineering) COMSATS, Islamabad, Pakistan.



#### Mr. Ali Raza Kalair Lab Engineer

- MSc (Electrical Engineering) Comsats University.
- BE (Electrical Engineering) Air University



#### Engr. Muhammad Haroon Amin Lab Engineer

• BE (Electronics Engineering), Iqra University Islamabad



#### Mr. Muhammad Adnan Asghar

Lab Engineer

BS Civil Engineering UET Taxila.



Ms. Sheher Bano Lab Engineer

- BS (Electronic Engenieeing) International Islamic University Islamabad.



#### Ms. Fareha Nadeem Lab Demontrator

• Pharm-D (Doctor of Pharmacy) Riphah International University Islamabad.



## Ms. Aroosa Mehwish

Lab Demontrator

• Pharm-D (Doctor of Pharmacy) Quaid e Azam University Islamabad.



#### Mr. Najum-Ul-Hussain Researcher

• BE (Electronics Engineering) Iqra University, Islamabad, Pakistan.



## Mr. Malik Muhammad Irfan

PhD (Management) Scholar

- MS (Management Science) SZABIST, Islamabad, Pakistan.
  - MSc (Management Science) Quaid-e-Azam University, Islamabad, Pakistan.
- B.Com, Punjab University, Lahore.



#### Mr. Tasawar Husain

PhD (Computer Science) Scholar

- MS (Computer Science), MAJU, Islamabad, Pakistan.
- MSc, University of Peshawar, K.P.K, Pakistan.
- BSc, University of Peshawar , K.P.K, Pakistan.



#### Mr. Naeem Akhtar

PhD (Computer Science) Scholar

- MS (Computer Science) Islamic international University, Islamabad, Pakistan.
- BS (Computer Science) Islamic international University, Islamabad, Pakistan.



#### Mr. Moin-ud-Din Qureshi

PhD (Operations & Supply Chain Management) Scholar

- MS (Engineering Management) NUST, Islamabad, Pakistan.
- BS (Electrical Engineering) UET, Peshawar, K.P.K, Pakistan.



#### Mr. Riffat Iqbal

PhD (Operations & Supply Chain Management) Scholar

- MSc, UET Taxila, Pakistan.
- MBA (Marketing), Institute of Leadership and Management, Lahore.
- BA (Economics), Punjab University, Lahore, Pakistan.



#### Mr. Saif-ur-Rehman

PhD (Computer Science) Scholar

- MS (Information Technology), SZIABIST, Islamabad.
- MSc, Gomal University, DI Khan.
- BSc, Gomal University, DI Khan.



#### Mr. Zeeshan Khan

PhD (Operations & Supply Chain Management) Scholar

- MBA (Supply Chain & Project Management) Iqra University, Islamabad.
- BS (Electrical Engineering) UET, Peshawar, K.P.K, Pakistan.



#### Mr. Moazzam Jan Bakhtiar

PhD (Management) Scholar

- MS (Management Science) MAJU, Islamabad, Pakistan.
- MBA, AIOU, Islamabad, Pakistan.
- M.Com, University of Peshawar, K.P.K, Pakistan.
- B.Com, University of Peshawar, K.P.K, Pakistan.



#### Mr. Muhammad Asif PhD (CS) Scholar

- MS (Artificial Intellgence) PMAS, AAU, Rawalpindi, Pakistan.
- BS (Information Technology) PMAS, AAU, Rawalpindi, Pakistan.



#### **Mr. Tariq Ali** PhD (Computer Science) Scholar

- MS (Computer Science) MS (Computer Science), MAJU Islamabad, Pakistan.
- BIT, Gomal University, Pakistan.

## Abasyn University Societies

Abasyn University has a wide variety of clubs which promotes extra co-curricular activities, so that students along with their studies can lighten up, enhance their practical skills, groom their personalities and explore their hidden talents.

AMC (Abasyn Media Club) serves as a platform where all the latest news and events are updated whether hosted by themselves or other societies occurring in Abasyn University. Together with encouraging students to enhance their skills on photography content writing and editing.

Greping serves as a platform where students can enhance their skills by being updated on all the seminars and workshops related CMMI and Agile methodologies, Microsoft, python and other events occurring in this university.

Khakka is a society which promotes art, culture and drama. This is a club where a variety of events take place from arranging events such as Eid melad ul Nabi to organizing dramatic plays and romoting creativity within students.

This society promotes awareness within students about healthcare, knowledge about life threating diseases, and organizes events health related seminars and holds conferences related to biosciences.

Silver ink is a society which promotes Urdu and English literature. Along with that, it is also responsible for organizing debates, speeches, book club discussions and other literary events, enhancing communication and writing skills, promoting creativity, critical thinking and love of books.

ACES (Abasyn Civil Engineers Society)



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## Products Developed By R&D Labs, hosted at the Abasyn University Islamabad Campus

Renzym products are focused on the development of true SDRs with the minimum of implementation effort in the hardware. Our team is striving to provide our customers with state of the art SDR platforms and software frameworks that can enable them to build software defined radios directly from personal desktops/laptops using USB and sound card interfaces. Our main products include:

#### **HF SDR Transceiver**

HF SDR Transceiver is a high performance, direct conversion HF transceiver for high data rate, long range HF Tactical radios with frequency hopping and ALE capabilities. Its key features include 48 KHz of channel bandwidth, onboard DDS chip for carrier generation and USB interface.

ENZYM

#### **SDR Communication Kit**

SDR Communication Kit enables true SDR development directly from Matlab/LabView class room simulations. It is a USB powered device specifically designed for hands on communication system design experience for engineering labs and organizations involved in the SDR development.



#### **Renzym SDR Framework**

RSF is a digital modem software with more than 15 built-in PSK, QAM and FSK waveforms and C/ Python APIs for development and rapid prototyping of SDRs. It can be used with HST, SCK or other front end hardware to readily build a real-time communication system.



## Mobile Application Development



**Augmented Reality** 

Augmented reality techniques have been implemented for many applications at the R&D Labs in Abasyn University, some of the examples are shown below.



Video Play

Alphabets

Solar System



**Medicine Description** 

AR Piano

AR Car

## Facilities at the Abasyn University Islamabad Campus

- Library Equipped with Latest Books:
  - o More than 2000 books
  - More than 30 International research journals
  - A vast collection of latest reports on various topics
  - o Daily News Papers and magazines





 Campus Wifi Students can enjoy wifi internet facility all around the campus

 Latest Computer Labs
 Equipped with latest technology and softwares





Laboratories
 Equipped with latest technology and equipment

- Cafeteria
   Hygienic, Healthy Food Facility
- Girls Common Room





 Seminar Rooms
 Fully Equipped Seminar rooms available

Masjid





- Extra Curricular Activities
  - Sports Gala
  - Industrial Trip
  - Study Tour
  - Annual Student's Week

#### Internships - Industrial training program during studies

- Compulsory internship programs are incorporated to the curriculum of bachelor degree to enable students to get latest knowledge and get working experience in multi-national organizations.
- The aim of the internship program is to enhance the professional competency among the students and to have industry collaboration.
- $\circ$   $\;$  This will also help them to find good job or open up their own business.

We are planning to build another campus at Islamabad with a vision to provide world class facilities for teaching, study, entertainment and sports by 2015-2016.

## **Research Contribution by Abasyn University**

The University fully understands the important role of universities to produce new knowledge through research. Therefore, the University has launched quality journal in the area of Social Science which covers most of the academic programs offered at both the campuses. The title of the journal is "Abasyn Journal of Social Sciences". It is also hosted two international conferences on technology and business management in 2013 and 2014.

#### ACTBM-13 - 1st Abasyn International Conference on Technology & Business Management

The First Abasyn International Conference on Technology and Business Management was organized by Abasyn University, Peshawar and Islamia College, Peshawar on April 3-4, 2013. The conference received lot of papers from Pakistan and other countries. A total of 36 papers were accepted and approved by the review committee and presentation and conference proceedings. The event brought together several experts, researchers and



scientists from various universities and organizations at Peshawar to share their ideas with young researchers and students. Papers in the conference covered all important areas of business and technology including finance, marketing, HR, entrepreneurship, communication, wireless communication, computer science and engineering. The conference benefited all of the participants.

#### ACTBM-14 - 2nd Abasyn International Conference on Technology & Business Management

2nd Abasyn International Conference on Technology and Business Management took place on 26th MArch, 2014. It remained a great success at the Abasyn University Peshawar Campus. More 20 papers were presented at the conference covering variety of topics pertaining to business and technology domain. The conference was attended by many researchers and distinguished academicians from Pakistan and Abroad. Professor Saeed and Professor Qadar Baluch were the keynote



speaker at the event. Abasyn intends to continue its endeavors for cultivating the culture of research in the region by arranging third international conference in year 2018.

## **International Collaboration**

The University has also established a number of collaborations with foreign universities of UK, Turkey and China, where the students of Abasyn University can transfer their credit hours by 100%. These Universities include:



Southampton Solent University UK



University of Bedfordshire, UK



Surrey International Institute of Finance & Economics, Dongbei University China



British Institute of Technology and E-commerce London



Fatih University, Istanbul, Republic of Turkey.



Yildiz Technical University, Istanbul, Republic of Turkey.



Zirve University, Izmir,



Ishik University, Erbil, Iraq.



Suleyman Sah University, Istanbul, Republic of Turkey.

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# Admission Procedure

Abasyn University offers admission on open merit basis. There is no quota system followed at the University. The eligibility mentioned below must be fulfilled by the candidate at the time of submitting application. All candidates for undergraduate programs who are eligible for admission will be required to appear in the entry test arranged by the University (NTS test results are also acceptable in lieu of university entry test).

Admissions to various programs are announced through national news papers and social media well before the date of the entry test. All applications for admission are accepted on prescribed forms with attested photocopies of all the previously obtained Degrees/Certificates/DMCs, and any other document mentioned in the application form attached to the Prospectus.

Admission is based upon careful review of all credentials presented by the applicant. These applications will be considered without regard to race, gender, age, religion, marital status, physical disabilities, and national origin. All required admission documents should be submitted to the Office of Admissions. The University reserves the right to change its admissions policy without prior notice.

## Eligibility

callin

BE Electrical Engineering (BEEE) BE Civil Engineering (BECE) Doctor of Pharmacy (Pharm-D) The candidate must have 60% or above marks in Intermediate (pre-engineering) or equivalent to apply for admission to the BE Electrical Engineering program.

The candidate must have 60% or above marks in Intermediate (pre-medical) or equivalent to apply for admission to the Doctor of Pharmacy program.

#### **Other Programs**

The candidate must have one of the following qualifications with an overall 2nd division or equivalent grade.

#### For the Bachelor's Program:

- a. Intermediate with certain required courses according to the chosen discipline of study
- b. For the A-levels students the following criteria applies:
  - 3 Full credit courses of A Levels.
  - Students will be required to produce equivalency certificate from Inter Board Committee of Chairmen (IBCC) within two months of the admission offer.

Selection criteria and weightages:

- a Matric : 10%
- b. Intermediate : 50%
- c. Entry test, NTS or any aptitude test : 40%

#### For the Master's Program

- a. The candidate should have passed 4 year Bachelor's\* degree from any recognized university with certain required courses according to the chosen discipline of study. (for example for admission to MS in Electrical Engineering - a 4 year BSc Electrical Engineering).
- b. The candidates are required to provide NTS General TEST result with a minimum

cumulative score of 50 percent, within the first two semesters after inrollment The admission office provides guidance how to take NTS examination.

### For Standing Admissions (Transfer Students)

All potential students applying for transfer of credits must have been enrolled in an HEC recognized institution. Furthermore, they are required to fulfill and complete all admissions requirements for their respective programs. The following criteria will be used to assess the Academic eligibility of transfer students:

- a. Duly completed Transfer of Credit form.
- b. Mark sheets/transcripts of current and previous academic work
- c. Course outlines for all courses that a student wants to be transferred to the university.
- d. No objection certificate from the previous institution of enrollment.
- e. All potential candidates are required to take the Admission examination, unless they are transferring from another campus of Abasyn University.
- f. According to the university policy students must complete at least half of the program to get a degree.
- g. No credit hour of a course will be transferred if the grade is less than C for undergraduate/Master of 16 year and B for Master/Mphil programs.



# Application



The fee for the application packet i.e.

Rs.1000/- can be paid in cash if collected in person. If requested by post the fee should be sent in the form of a bank draft or pay order in the name of Abasyn University. Application can be downloaded from official Website of Abasyn University (www. abasyn.edu.pk). Application can be filled and submitted online as well. However students are required to bring their required documents on the day of test/interview. Application must be submitted before the deadline fixed by the University.

#### **Required Documents with application**

The following documents are required to be submitted along with the Admission Application Form:

- Completed Admission application form.
- Mark sheets of all previously completed academic work.
- If a candidate has completed previous academic work from another education system, an Equivalence Certificate from the Inter Board Committee of Chairmen

(IBCC) is required within two months of the admission offer.

- 4 Passport size photographs.
- Copy of Computerized National Identity Card / Form B.

#### **Admission Test**

Abasyn University arranges its own entry test to make sure that the quality of intake is the best. However, the university also accepts NTS, TOEFL, IELTS test scores for the admission in the replacement of its own entry test. The admissions test covers the following areas:

- 1. English
- 2. Mathematics
- 3. Logic and Analytical

Abasyn University provides students with all the necessary examination stationary, thus students don't need to bring anything along with them.



# Fee Structure and Financial Support

The University is well aware of the economic conditions of the country. Therefore, the University has exceptionally subsidized tuitions fee of all of the academic programs. The fee structure is vary from the program to program. The fee is charged on Credit hour basis during each semester. Candidates are requested to obtain information about the tuition of fee of each program from the admission or finance offices.

In addition to tuition fee students are also required to pay the following fee:

- Admission fee Rs.5,000/- once at the time of admission
- Refundable security Rs. 5000/- once at the time of admission

- Registration fee Rs. 3000/- per semester
- Miscellaneous fee Rs. 6000/- per semester
- Degree fee Rs. 10,000/- once at the time of completion and award of degree

The university reserves the right to change the fee structure without prior notice to students. Tuition fee is increased by 3%-7% each year. Tuition Fees at Abasyn University are quite affordable as compared to others. Details can be obtained from Admission Office or visit our website www.abasynisb.edu.pk.



Orientation Session



EE Farewell party Batch Fall 14

# Academic Policies and Rules



#### **Academic Integrity**

Abasyn University expects integrity from every student and staff in all academic work. AU does not support plagiarism in any form. AU main principle regarding the academic integrity is that student's submitted work must be of his or her own creation. Conduct prohibited by the code consists of all forms of academic dishonesty, including: cheating, fabrication, facilitating academic dishonesty, and plagiarism which is defined in the code of conduct, modifying any academic work for the purpose of obtaining additional credit after such work has been submitted to the supervising faculty member. Failure observe rules of academic integrity to established by a faculty member for a particular course and attempting to commit any act prohibited by the code will result in severe action against the student which includes an automatic 'Fail' grade for the course and/or expulsion from the university.

#### Plagiarism

Abasyn University strongly discourages and condemns any form of plagiarism. Students caught cheating on any examination by using "notes" whether those notes were relevant to the test or not, or caught talking during examination, will receive an automatic 'Fail' grade for the course. Strong disciplinary action will be taken against the accused student, including expulsion from the university. Students caught applying "copy & paste" or copying other student's work on assignments will receive an automatic '0' marks for that assignment.

#### **Academic System**

The University follows semester system for all of its degree programs. Each academic year consists of two regular semesters, i.e., Fall and Spring semesters. However, an optional condensed Summer semester is also offered to enable students to cover up any deficiency occurred in the regular semesters.

# Academic Duration for various degree programs

Most of the bachelor degree programs consist of four years. However, there are certain programs which are completed in two years such as Bachelor of Commerce (BCom), and associate degrees.

Students are expected to complete their education within a specified period of time for the degree they are enrolled for. For fulltime Bachelor students, the normal time needed to complete their degree program is four (4) years and the maximum time permitted is six (6) years. Master degree students are expected to complete their degree requirements within one and half (1.5) to three and half (3.5)years.

#### **Credit Hour**

Each class is defined by the number of credit hours. At Abasyn University, majority of classes are either 3 or 4 credit hours. One credit hour is equivalent to 15 contact hours. However, one credit hour lab is equivalent to 2 to 3 contact hours per week.

#### **Academic Load**

Academic load varies from program to program. Normally a student takes 15-18 Credit Hours course work in a semester at the four years degree program. As Abasyn University offers a variety of degree programs, therefore, the academic load varies from degree to degree. See details in student hand book.

#### Registration

All students of Abasyn University are required to register each semester according to schedule announced by the University authority. Registration is a useful process for both the students and academic Departments in order to plan students' studies for the whole semester. Student can register minimum possible load depending on his performance in the previous semester(s). The Department can also advise weak students to not register for full load but improve the academic standing to clear the academic probation (if any).

#### Withdrawal from University

A student who wishes to withdraw from the University must notify the Admissions Office and Head of Department in writing by completing the University Withdrawal form. The Admission Office after proper procedure will issue a letter to student for the closure of the admission in the University.

#### **Freezing of Semester**

A student may request freezing of his/ her admission for up to 2 semesters along with 'Semester freeze' charges of Rs. 5,000 per semester. The written approval of the Head of Department and the Registrar is required. A student cannot freeze more than two semester consecutively and a student cannot avail this facility for more than two time in the whole degree duration.

#### **Grading System**

Since AU offers a diverse degree program, therefore, grading scheme varies from discipline to discipline. Letter grades, standing, percentage and grade points are shown in the table below:

Letter Grade	Standing	Percentage	Grade Point
Α	Outstanding	85-100	4.00
A-	Excellent	80-84	3.67
B+	Very Good	75-79	3.33
В	Good	70-74	3.00
B-	Above Average	65-69	2.67
C+	Average	61-64	2.33
С	Moderate	58-60	2.00
C-	Acceptable	55-57	1.67
D+	Pass	53-54	1.33
D	Pass	50-52	1.00
F	Fail	Below 50	0.00
۱*	Incomplete		
W*	Withdraw		

\* Are not included in the calculation of Grade Point Average (GPA).

#### **Academic Probation**

Students whose performance is not satisfactory are kept on academic probation. The following rules of academic probation will be used:

- a. If a student obtains a GPA less than 2.0 in a semester, the student will be placed on academic probation. Students in this status are urged to seek academic counseling through appointment with the Head of the Department or the Dean.
- b. If a student who continues to get a GPA below 2.0 in the following semester will be placed on second academic probation. Student and his parent/ guardians will also be informed about the weak performance of the student..
- c. A student who fails to raise his/her GPA above 2.0 after the second probation period will be dismissed from the university. However, if the student manages to raise the GPA above 2.0, then their name is removed from the probation list.

A student on probation is advised not to take more than 12 credit hours per semester (3-4 courses) until he/she is not removed from the probation list.

# Repetition of Course with lower grades

Students who obtain a grade below 'C' will be allowed to improve their grades. In case a student with C+ grade would like to improve his/her grade will be required to get a written permission from the registrar office with the final approval of the Vice Chancellor.

#### **Attendance Requirements**

Abasyn University expects students to be punctual and regular in all classes. The students must attend 75% of total classes held in a semester. A student must also maintain at-least 65% in each course to be eligible to appear in the examination. A student does not fulfill the above requirements will be automatically award 'F' grade in the concerned subject.

In case of an unexpected emergency or absence on genuine grounds, students must submit an application to Head/Dean office with all relevant documents. The Dean or a committee review these kinds of cases and recommend for approval in relaxation of attendance to the Vice Chancellor. In case, the students were absent from classes because of the University sponsored events, it will be the University responsibility to arrange make-up classes for these students.

#### **Dean's List of Honors**

A Student is placed on the Dean's list, if his/ her SGPA equals or exceeds 3.50 at the end of semester. Such a student receives a certificate and cash award and his/her name is also placed on the University's website. Only those students are included in this list who have completed the semester with regular course load prescribed in the study plan.

#### **Vice-Chancellor's List of Honors**

A student is placed on the Vice-Chancellor's Honours list, if his/her SGPA is 4.00 at the end of a semester. Such a student receives a certificate and cash award and his/her name is also placed on the University's website. Only those students are included in this list who have completed the semester with regular course load prescribed in the study plan.



BUILDING **A NATIONWIDE** KNOWLEDGE COMMUNITY THROUGH QUALITY EDUCATION, **RELEVANCE**. **CRITICAL THINKING,** CREATIVITY. RESEARCH AND SOCIAL RESPONSIBILITY

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