



# Medical & Dental College

Bahria University Medical and Dental College provides an inspirational, conducive, safe and friendly environment to nurture academic, moral and social excellence and expects from its students to exhibit professional excellence with respectful behavior towards teachers, colleagues, health care professionals and above all; patients!

Our students are provided hands on learning not only in the wards and emergency room but also on mannequins in the skill lab. we use innovative teaching techniques such as PBL (Problem Bases Learning) and

PSIL (Problem Solving Interactive Learning) where teachers interact with small group of students and where the learner drive the learning. Our vision is to establish a center of excellence in medical/ dental/ Physical Therapy education and research at par with international standards.

## 🕒 Master of Philosophy M.Phil

- Anatomy
- Pathology
- Pharmacology

### Available Campuses

Medical & Dental College,  
Karachi

### Regular Program Duration

2 Years  
4 Semesters

### Available Specialization

- Anatomy
- Pathology  
(i) Histopathology  
(ii) Microbiology
- Pharmacology

### Program Timing

Morning

### Entry Requirements

- 16 years of education with MBBS/BDS from PMDC / HEC recognized university/institution with minimum CGPA 2.5/4.0 or 50% marks where CGPA is not given
- Completion of one year house job at PMDC recognized institution
- HEC's attestation on candidate's local degrees (on back of original degrees)
- HEC's equivalency certificate for the candidate's foreign degrees
- All candidates seeking admission are required to provide GAT General score with minimum 50 % cumulative score or BU test (50% minimum passing marks). Result is to be submitted at the time of application in case of GAT (General) or GRE (General) or as prescribed by the University

### Introduction

Bahria University Medical & Dental College (BUMDC) is committed to the pursuit of excellence in medical and dental education. Our Master of Philosophy (MPhil) degree programs in Anatomy, Pathology & Pharmacology are aimed to prepare postgraduates for medical education institutions particularly in areas of basic science research, and teaching. This will promote basic sciences education, and provide opportunity for junior medical and dental faculty including that of Bahria University Medical & Dental College (BUMDC) to enhance their professional career as a teacher and researcher in the field of basic medical and dental sciences.

Our program with the mission statement of BUMDC:

**To be an internationally recognized institution of educational excellence that will provide the community with safe, competent, ethical and research oriented health care professionals**

is committed to develop professionals that will play the role of a productive leader equipped with professional attitudes , ethical and moral values for the world of health care professionals.

### General Objectives of Our Degree Programs:

- a) To promote faculty development in higher education that will strengthen basic science teaching and research in medical professional institutions including BUMDC
- b) To encourage a culture of critical inquiry for promotion of evidence-based teaching and research
- c) To conduct original research under supervision
- d) To value progress of science on the basis of evidence
- e) To appreciate ethical and moral values
- f) To present the results of research in national and international scientific forums
- g) To publish research results in scientific national and/or international journals

### Learning Outcome of Our Degree Programs:

Our competent MPhil graduate will demonstrate:

- a) Professional attitudes and ethical values to fulfill its social and professional responsibility to its community
- b) Mastery in the subject of basic medical and dental sciences
- c) The application of theoretical knowledge to practice
- d) The ability to analyze the quality and implications of medical literature
- e) Research skills including analytical, synthesis, application and implementation
- f) The ability to write research articles for publications in indexed journals



- g) Basic computer skills, and use of SPSS and related soft wares
- h) Qualities of a responsible and effective teacher
- i) Interpersonal skills including communication with experts, self-critical, social skills and team work etc.
- j) Life-long learning skills, that is accept one's limitations to knowledge, and continue to update knowledge
- k) The ability to work independently

**Why choose Bahria University for the stated degree programs?**

- Among the top most universities of Pakistan
- Recognized & accredited by PMDC
- Federally chartered university
- Recognized by HEC
- Conducive academic environment
- International academic linkages
- Access to digital library
- Enhanced security environment
- Highly qualified teachers
- State of the art multidisciplinary research lab. with analytical, molecular, histopathological & pharmacological sections under one roof
- More than 700 bedded affiliated tertiary care PNS-Shifa hospital with round the clock working units & labs

**What will student study in these programs?**

**(A) COMMON COURSES TO ALL MPHIL PROGRAMS**

Research Methodology  
Biostatistics  
Epidemiology  
Medical Biology  
Medical Genetics  
Medical Education  
Medical writing  
Bioethics  
Instruments used in research & SOPs  
Animal use in research, teaching & testing

**(B) ANATOMY PROGRAM COURSES**

Neuroanatomy  
Anatomy of head & neck region

Gastrointestinal Tract anatomy  
Tissue processing  
Cadaveric dissection  
Advanced microscopic techniques  
Microscopic structure of tissues  
Developmental anatomy  
Anatomy of musculoskeletal system  
Cardiovascular & respiratory system anatomy  
Anatomy of urogenital system  
Anatomy of reticuloendothelial system

**(C) PATHOLOGY PROGRAM COURSES**

**(i) HISTOPATHOLOGY**

General & special pathology  
Histopathology & tissue processing  
Procedures & Reporting in histopathology Laboratory  
Endocrine & renal pathologies  
Molecular pathology laboratory – Related to tissue Pathology

**(ii) MICROBIOLOGY**

Basic & Special bacteriology  
Mycology  
Microbiology laboratory - procedures & reporting  
Infectious diseases & Molecular pathology Laboratory  
Virology  
Parasitology

**(D) PHARMACOLOGY PROGRAM COURSES**

Pharmacological concepts & Adrenergic Pharmacology  
Cholinergic & Cardio Respiratory Pharmacology  
Neuropharmacology  
Endocrine Pharmacology  
Gastrointestinal Pharmacology  
Chemotherapy  
Toxicology  
Pharmacogenetics  
Autacoids & Analgesics  
Age specific Pharmacotherapy  
Dental Pharmacology  
Drug Bio-screening & Herbal Medications

**EXCELLENT FUTURE CAREER PROSPECTS AS:**

Effective teacher in medical & dental sciences, Scholar for subsequent PhD studies, Researcher in academics,  
Successful leader in diagnostic laboratories, Strategic professional and researcher for pharmaceutical industry

