DOW UNIVERSITY OF HEALTH SCIENCES

BROCHURE
For
Admission in
MBBS (Session 2009)
at
DOW INTERNATIONAL MEDICAL COLLEGE (DIMC)

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VICE CHANCELLOR

DOW UNIVERSITY OF HEALTH SCIENCES
INTRODUCTION

The Dow University of Health Sciences recognizes the education of students and preventive strategies for community health care as one of its primary missions. The fundamental goal is to equip students with knowledge, clinical skills and the desire to excel in their chosen areas of medicine. In collaboration with appropriate institutions and professional bodies, we endeavor to guide students to choose from various areas of interest, general or clinical specialties, academic practice or basic research to fulfil the needs of society.

The University strives to provide its graduates with the skills and ability to analyze incorporate new knowledge, possess the attitude to be life long learners, and most of all to generate in them, the desire to serve the nation.

Dow International Medical College (DIMC) was established three years ago, in order to accommodate overseas pakistanis for MBBS as they face various difficulties in entering into medical profession abroad.

It was planned to have DIMC at it’s Ojha campus and got the project was approved by Higher Education Commission (HEC). Initially it was started in a Renovated block to gain time, Simultaneously the construction of the new building was also started.

INTERNATIONAL RECOGNITION of Dow International Medical College and other new Institutes of Dow University of Health Sciences

THE DOW INTERNATIONAL MEDICAL COLLEGE (DIMC) has been added in INTERNATIONAL MEDICAL EDUCATION DIRECTORY (IMED), while Dow Medical and Sindh Medical Colleges are already included in the directory.

The IMED provides an accurate and up-to-date source of information about international medical schools, recognized by appropriate government agencies (usually Ministry of Health) of the countries where the medical schools are located. These schools are then also recognized and listed by International Medical Education Directory (IMED).

The new building of DIMC is a specially designed building, having covered area of 175000 sqft and fully equipped with most modern equipments. Its construction was started in 2006. Now half of the building is ready and Inshallah DIMC will be shifted in this part of the new building.
Dow International Medical College (DIMC)
Established in 2006 in a Renovated Block at Ojha Campus

(Glimpses of Present Renovated Building)
- 100 Seat Medical College established mainly for Children of Overseas Pakistani
- Presently three Batches are studying at DIMC
- Total of 245 students (119 Males and 126 Females) are undergoing Semester Courses at DIMC
- First Batch will soon be appearing in 4th Semester (2nd year MBBS final examination)

- There are separate faculty members at DIMC, DMC & SMC.
- Laboratories are fully equipped with most modern equipments including POWER LAB
- Lecture Halls, tutorial rooms and labs are fully air conditioned.
- Powerful generators provide electricity round the clock.
- High standard Cafeteria provides hygienic eatables at DIMC.
- Newly constructed state of the art gymnasium and sports complex will be ready within few months time in the same Ojha Campus, for co-curricular activities of the students and the faculty members.

- Hostels are available alongwith MESS Facilities for boys and girls within the same Ojha Campus
- Security system is regularly monitored
- First Semester (2009) will start from 28th September, 2009
CLINICAL TRAINING will be provided at the DOW UNIVERSITY HOSPITAL in the same Ojha Campus.
INTERNET DIGITAL LIBRARY

The internet digital library has been established at DIMC, DMC & SMC. It has five different campuses, Dow Medical College (DMC), Sindh Medical College (SMC), Dr. Ishrat-ul-Ebad Khan Institute of Oral Health Sciences (DIKIOHS), Dow International Medical College (DIMC) and Institute of Medical technology (IMT), having more than 300 computer stations connected to the main high class server to have large storage capacity and HEC connectivity for access to more than 22,000 journals and text books. It has been sponsored by HEC for the benefit of the students and the faculty members, to help in updating knowledge and acquire information for research.

All five campuses of DUHS have separate digital libraries, interconnected by radio frequency. There is also a library having more than 3500 books along with spacious reading halls.
CAFETERIA AT DIMC
Located in open and scenic atmosphere

RESEARCH FACILITIES
The PATHOLOGY DEPARTMENT of DIMC is associated with ‘Dow Diagnostic Research and Reference Laboratory (DDRRL), for advanced, basic and clinical research in medical sciences and critical evaluation of current researches in different disciplines.

The DOW LAB provides reliable high quality diagnostic services of international standard, offering a broad range of routine and special tests at extremely economical rates. These tests are performed by a team of qualified and experienced technologists and technicians under the supervision of a group of Board certified pathologists. The laboratory services and consultants are readily available to meet the patient’s, requirements need and includes hematology, chemistry, coagulation, urinalysis, serology, therapeutic drug monitoring, pathology and morgue services.

The Research Laboratory (DDRRL) also provides research facilities to the students of MPhil, PhD, MS and MD in pathology. It provides accurate and precise diagnostic, prognostic and predictive testing services in a timely manner with high accuracy.
The Dow Medical College and Sindh Medical College are old institutions and since long have produced doctors holding strategic positions, globally.

THE DOW INTERNATIONAL MEDICAL COLLEGE (DIMC) is also in line with DMC & SMC as it has also introduced integrated objective based curriculum since its inception. It has also switched to the SEMESTER SYSTEM OF EDUCATION from this academic year.

An integrated curriculum can be defined as courses with subject matter classified by organ systems rather than according to the departments such as anatomy, physiology or biochemistry. Such a curriculum fosters professional development, and is coupled with systematic and coherent development of clinical and communication skills.

**EDUCATIONAL GOALS AND OBJECTIVES**

The following three goals make up the foundation of the undergraduate medical education programs at Dow University. Program-level objectives have been identified within each of the three educational goals.

i) Self directed learning and life long learning skills
ii) Core biomedical Science Education
iii) Skills Training

Educational activities build upon the foundation provided by these program-level goals and objectives to ensure that our graduates develop into competent, caring health professionals for individual patients and the society.

**SKILLS TRAINING**

Three years ago the teaching of requisite skills, were introduced at Dow Medical College and Sindh Medical College, right from the first year MBBS.

The “UNDER-GRADUATE SKILL LABORATORY” has been established in the institutions, for hands on training of the students. A skill curriculum has been designed for each year and is now being implemented phase-wise.

These skill laboratories are equipped with the LATEST TRAINING SIMULATORS and MANNEQUINS and POSSESS VIDEO’S OF ALL PROCEDURES. This will provide students the advantage of having structured hand-on training with the help of MANNEQUIN’S in all skills required to deal with actual human beings in practice as patients.

**THE SKILLS BASED CURRICULUM** is according to the current health requirements, and includes proficiency in essential skills like monitoring vital signs, cardiopulmonary resuscitation, common procedural skills, infection control skills as well as communication skills, necessary for all doctors.

The added component of hands-on training, for the students, will increase their competency and will help them in becoming effective doctors.
CLINICAL SKILLS

The Students must develop skills in problem solving and clinical reasoning. Prior to graduation, students need to demonstrate the ability to:

- Identify positive and negative findings, while solving clinical problems;
- Define individual clinical problems on the basis of proper history;
- Integrate patient information on the basis of clinical and basic science knowledge;
- Formulate differential diagnosis;
- Derive a therapeutic plan for addressing problems, as per need.
- Recognize patients with life-threatening conditions and to institute appropriate initial therapy, without wasting time.
- Recognize and outline the initial course of management for patients with serious conditions requiring critical care; and to
- Identify factors that place individuals at risk for disease or injury and select appropriate tests for detecting patients at risk, regarding specific diseases, at an earlier stage of the disease. This will help in possible cure or control of the disease.

SKILLS FOR INTER-PERSONAL COMMUNICATIONS

The students should develop skills for acquiring information and communicating with the patient for diagnostic and therapeutic purposes. The students should demonstrate the ability to communicate and obtain accurate and complete medical history, including issues related to age, gender, and socioeconomic status besides the main symptoms. They also need to develop verbal and writing skills in order to have effective communication with colleagues and senior physicians.
DOW UNIVERSITY OF HEALTH SCIENCES has adopted a new method of Practical & Viva Examination Known As (OBJECTIVE STRUCTURED PRACTICAL EXAMINATION) OSPE

Major differences between old Practical and New OSPE system are briefly mentioned below:

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<tr>
<th></th>
<th>NEW OSPE SYSTEM</th>
<th>OLD METHOD OF VIVA &amp; PRACTICAL</th>
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<tbody>
<tr>
<td>1.</td>
<td>90% of the Topics studied through out the year are covered during the test</td>
<td>Only 30-47% of the Topics are covered during the test</td>
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<tr>
<td>2.</td>
<td>Questions are Structured (same for every student)</td>
<td>Questions are NOT Structured (different for every student)</td>
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<td>3.</td>
<td>The subject of examination have fifteen (15) stations for rotation after every 5 minutes where written command is to be answered in writing. Four (4) stations have examiners asking structured questions (each for 5 mins). The answers of students are documented.</td>
<td>There are only two sets of examiners maximum four (4) stations asking unstructured questions according to their will, with no time limit and passing or failing the candidate on the basis of their perception with no documentation of answers.</td>
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<td>4.</td>
<td>New OSPE test’s Maximum students in Minimum time covering major topics in a transparent way like 700 student of 1st year MBBS can be examined for anatomy, physiology and pathology only in three days (Max 2 hrs daily).</td>
<td>Old system examination of 700 students takes more than three weeks to examine 700 students, without any transparency and covering only topics of examiners choice</td>
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<tr>
<td>5.</td>
<td>The students have to prepare the whole subject</td>
<td>The students prepare selected topics of every subject</td>
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<td>6.</td>
<td>It is student friendly, not making them nervous.</td>
<td>It is NOT student friendly putting them in stress.</td>
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MENTOR SYSTEM
AT DOW UNIVERSITY INSTITUTIONS

The Dow University has introduced MENTOR SYSTEM in Dow Medical College (DMC), Sindh Medical College (SMC), Dow International Medical College (DIMC) and Dr. Ishrat-ul-Ebad Khan Institute of Oral Health Sciences (DIKIOHS). This is to develop student-teacher relationship for enhancement of academics and moral support for career and personality development. Each faculty member will be MENTOR of about 10-15 students and will have weekly meetings with the students, besides meeting them as and when required.

A good MENTOR seeks to help a student according to his educational experience, so as to assist the student’s socialization into disciplinary culture, and to help him find suitable employment after graduation. These obligations can extend well beyond formal schooling and continue throughout the career of the student.

MENTOR RULES

- Each student will preferably have same MENTOR from 1st to 5th Year MBBS.
- The MENTOR will maintain separate record of every student for whom he is responsible.
- One period is allocated every week for MENTORS to have meeting with their students and have feed back along with portfolio Proformas.
- These weekly portfolio Proforma (WPP) are later sent to the quality enhancement cell (QEC) department of Dow University of Health Sciences (DUHS). These Proformas will than be returned back to the students within the week.
- The MENTOR will send summarized report of every student each month to the Deans of the respective Colleges.
- The performance of students and MENTORS will be evaluated by the QEC department of DUHS.

RESPONSIBILITIES OF MENTOR

1. Recording the academic performance of allocated students.
2. To identify student’s learning problems.
3. To identify and possibly rectify Personal & Physical Problems (if any), of the concerned student.
4. To help in sorting out logistic problems of students.
5. To Solve Medical Problems (if any).
6. To encourage students for Co-Curricular Activities.
7. To encourage healthy social interaction etc.
8. To keep an eye on all types of activities inside and outside the campus.
9. To maintain attendance record.
10. To take Disciplinary Action (when required).
11. To handle any situations requiring special attention.
12. To keep in touch with parents / guardian of students.

ESTABLISHMENT of QUALITY ENHANCEMENT CELL (QEC) at DOW UNIVERSITY OF HEALTH SCIENCES (DUHS)

INTRODUCTION

The quality of teaching and learning in the higher education institutions has been under great criticism for quite a long time. The emergence of private institutions and their mushroom like growth is the result of declining confidence of the common man in the public sector universities of Pakistan. Keeping this in view, Higher Education Commission established Quality Assurance Agency (QAA) in Islamabad and Ten (10) Quality Enhancement Cells (QEC) at various public sector universities of Pakistan. It will also establish QEC in 20 more public sector universities in the next phase of the programme. DOW UNIVERSITY OF HEALTH SCIENCES was selected for the establishment of QEC on October 16th, 2006 by the Quality Assurance and Learning Innovation Cell of Higher Education Commission.

The Dow University of Health Sciences then established Quality Enhancement Cell (QEC), headed by Director Dr. Abdul Wahid Usmani who is PhD in Assessment & Evaluation and has conducted many programs pertaining to learning, techniques, assessment and evaluation.

QUALITY ENHANCEMENT CELL

Vision

“A Model Quality Assurance Setup” has been established at the Dow University, with standardized procedures and practices in health education.

MISSION

Developing localized benchmark standards for quality assurance in all the educational institutions of the university and enhancing the same to the level where they may be compared with the international practices in health education.
PROGRAMMES of QUALITY ASSURANCE AT DOW UNIVERSITY

The Quality Enhancement Cell (QEC) currently is working on the following programmes:

PROGRAMME EVALUATION

It includes all the degree, diploma or certificate courses being offered by the Dow University. All these programmes prepare a SELF ASSESSMENT REPORT on the basis of criteria prescribed by the HEC.

DEPARTMENTAL QUALITY ASSURANCE

This programme is focused on the performance of the departments on unit basis. They are provided with a framework to maintain quality standards at the departmental level.

ACADEMIC AUDIT

This programme focuses on the internal academic audit of different disciplines and departments, providing a useful feedback for the external audit programme of Higher Education Commission (HEC) Pakistan.

ASSESSMENT REFORMS

This programme focuses on applied assessment strategies used at Dow University and has thus INTRODUCED NEW AND INNOVATIVE WAYS FOR ASSESSING THE DEGREE OF BENEFIT STUDENTS DERIVE FROM THEIR CLASSES.

These include:

- Development of item bank
- Setting standards for reliability and
- Developing a framework for practical examination to make them more objective.

TRAINING AND DEVELOPMENT

This programme focuses on the training needs of the faculty and provides a forum and channel for the enhancement of professional skills.
STANDARDS in EDUCATIONAL PROVISIONS

It has been realized that not only teaching but other educational entities or facilities such as digital library, regular library, professional development programmes, guest lectures, seminars and other scholarly activities are necessary to maintain high satisfaction level of the stakeholders. QEC programmes focus on the evaluation of such educational provisions and prepare report on annual basis. The department has also developed curriculum objectives to make QEC programmes more effective.

The Dow University of Health Sciences has made considerable progress in this respect. The programs have been formulated as per standards of Higher Education Commission.

All the constituent institutes of DUHS namely Dow Medical College (DMC), Sindh Medical College (SMC), Dow International Medical College (DIMC) and Dr. Ishrat-ul-Ebad Khan Institute of Oral Health Sciences (DIKIOHS) has developed curriculum objectives to make their programs more effective. They formulated quality assurance teams in their institutions to act as MENTORS and have developed TEACHERS’ PORTFOLIOS to document teaching practices of the faculty members.

The department of QEC also conducts several FACULTY DEVELOPMENT PROGRAMS on regular basis for more effective teaching and learning of the students. The fundamental goal is to produce graduate students with updated knowledge, clinical skills and desire to excel in their chosen areas of medicine.

The students are encouraged to do research according to the needs of the society. with the help of appropriate social professional bodies.

The Dow University of Health Sciences strives to provide its graduates with the skills to be life long learners. This requires broad base knowledge of basic clinical sciences and the ability to analyze and incorporate new knowledge. The student should also possess a positive attitude and values that include respect for life and desire to care sufferings by becoming caring health professionals.

The Dow University endeavors to produce such graduates by providing following skills:

1. Self directed learning and life long learning skills.
2. Core Biomedical Science Education.
3. Clinical skills.
4. Problem solving / Clinical reasoning skills.
5. Communication skills.
6. Information Management skills.
7. Professional Attitudes and Behaviors.
The evaluation of teachers play a key role in their professional development and performance. THE QEC REGULARLY EVALUATES THE PERFORMANCE OF TEACHERS THROUGH A TEMPLATE PROVIDED BY HEC ON THE VARIABLES INVOLVED IN QUALITY TEACHING e.g. student participation in the class room, teacher’s knowledge and preparation etc.

The Students should focus on research areas and fill a Proforma including the list of faculty members, who taught them. This data is then collected and analyzed by the QEC team to assess the performance of the teachers in a given period of time. Percentages are then calculated and verified for the results to be crystal clear and the teachers are ranked accordingly.

THE TEACHERS’ PORTFOLIO documents the progress of a teacher through the inclusion of a teaching plan, Lectures, Summaries, Assessments conducted and students progress report. It also includes the teaching philosophy of the teachers and their vision & mission alongwith their objectives for learning and teaching. This portfolio is maintained by the teacher and periodically submitted to QEC by the teachers themselves.

This procedure is expected to yield benefits in the near future as part of our emphasis is on continuing teacher development.

STUDENTS’ PORTFOLIO is a system of “continuous assessment of students own learning”. They maintain their portfolios which include their thoughts and observations regarding how much they learned while attending lectures and tutorials. They are evaluated by their MENTORS on a regular basis.

A GOOD MENTOR helps the student in improving academic performance from first year to final year MBBS, which also addresses the issues of learning, psychological and medical problems. MENTOR also guides the student, regarding co-curricular activities, inside and outside the campus as well as social interaction.

The MENTOR also keeps an eye on the punctuality and regularity of the student in the class besides his behavior and attitude, so that disciplinary action is taken when needed.

By the grace of God, the students of Dow University of Health Sciences acquire medical education of high international standard as they are continuously monitored and guided by the faculty.
HOSTEL ACCOMMODATION
AT DOW INTERNATIONAL MEDICAL COLLEGE (DIMC)
OJHA CAMPUS

- Hostel Accommodation available in the same Ojha campus for:
  - GIRLS and
  - BOYS (only from USA)

- Two students will be allotted one room
- No student will be allotted single room
- The students will have to strictly follow rules and regulations mentioned in the brochure given to them
- The room will only be allotted after given procedure is followed and the sureties are submitted
- Room rent per year for every student will be Rs. 66000/-
- MESS facilities will be available

- Guests will not be allowed to stay in the hostel
- Generator facility is available for round the clock provision of electricity
- Hostel allotment may be cancelled if any student does not follow hostel rules and regulations.
SPORTS FACILITIES AT DIMC

State of the art gymnasium and sports complex having a cricket ground, squash and badminton courts, etc is under construction and Inshallah will be ready within six months for the students and the faculty members.
APPLICATION FORM

APPLICATION FORMS FOR ADMISSION AT DOW INTERNATIONAL MEDICAL COLLEGE WILL BE AVAILABLE ON WEBSITE FOR ADMISSION IN DOW INTERNATIONAL MEDICAL COLLEGE........ from JUNE 2009.

The application form and the required documents have to be submitted along with the admission fee of Rs. 12,000/- to be paid as pay order in favour of Dow University of Health Sciences, Karachi. The application form and the required documents fulfilling eligibility criteria should be submitted latest by 10th September, 2009.

Early submission is necessary for early processing and seat allocation.
ADMISSION PROCEDURE
ELIGIBILITY FOR ADMISSION
in MBBS at
DOW INTERNATIONAL MEDICAL COLLEGE (DIMC)
DOW UNIVERSITY OF HEALTH SCIENCES

- The candidate should have passed Matric / O Level / Equivalent examination from any recognized institution outside Pakistan.
- The candidate should have passed Inter Science / A Level / Equivalent examination from any recognized institution, outside Pakistan.
- They have to submit SAT II Score Min. 550 Seperately in Chemistry, Biology and Physics/Mathematics.
  OR
- The candidate should have IBCC equivalence certificate having Min. 60% marks.

- The selection will be on merit, based upon percentage of SAT II Scores OR IBCC Marks.
- All selected candidates will have to submit, the Bank draft of 12,000 US Dollars (Non-refundable) in favour of “Dow University of Health Sciences” as tuition fee for (first two semesters) at the time of final selection on the specified date, to be mentioned later, on website, otherwise the admission will not be finalized.

The fees for subsequent MBBS courses will have to be paid at the time of receiving admit card for following semester’s examinations.

- Second (2nd Semester) ..............(12,000/- US Dollars)
- Fourth (4th Semester) ..............(12,000/- US Dollars)
- Sixth (6th Semester) ..............(12,000/- US Dollars)
- Eight (8th Semester) ..............(12,000/- US Dollars)

[HOSTEL FEES NOT INCLUDE IN TUITION FEES]

Hostel Fee, for Boys and Girls ---Rs. 66000/Year (Excluding MESS Charges, to be paid in advance every year and MESS Charges to be paid in advance every month).

NOTE:
- The SAT II Score Min. 550 in Biology, Chemistry and Physics / Mathematics is mandatory in the absence of IBCC Certificate.
- Eligibility criteria requires either SAT II Score or IBCC Certificate, ..........NOT both.

- In case the candidate submits Provisional IBCC equivalence certificate, he/she will be given provisional admission. But before the first semester examination the student will have to submit original IBCC certificate. In case of default he/she will NOT be allowed to appear in the examination.
- In case final admission is given, all the original documents will have to be submitted in the admission cell.
- The fee is subject to revision by the university at any time during the course of the study.
- Any fee deposited is non-refundable
DOCUMENTS REQUIRED FOR ELIGIBILITY OF ADMISSION IN MBBS AT DIMC

- Application form (to be downloaded from website of DUHS).
- Copy of all transcripts (at least until 12th grade).
- Copy of all certificates acquired.
- Copy of IBCC equivalence certificate (Min 60%) or SAT II (science subjects) score (Min 550).
- Proof of being overseas Pakistani.
- Six recent passport size photographs.
- Admission processing Fee--- Rs. 20,000 (twenty thousand) as pay order in favour of Dow University of Health Sciences.

FEE PAYMENT SCHEDULE

- The admission will be finalized only when the eligibility criteria is met and the tuition fee of 12,000 US Dollars for Semester 1 and Semester 2 is paid by Bank draft in favour of Dow University of Health Sciences, Karachi.

- The tuition fee for subsequent semesters will be charged at the time of obtaining admit cards for 2nd, 4th, 6th and 8th semester examinations. The defaulters will not be allowed to appear in the examination.

- Examination Fee for each semester shall be collected at the time of submission of examination form along with required documents.

FEE for Repeater Students

The tuition and examination fee will be charged as per number of repeated courses, undertaken by the candidate.

ASSESSMENT OF STUDENTS

i) Continuous evaluation will constitute 20% of total marks. (for semester examination)

ii) Semester Examination will constitute 80% of the total marks.

iii) All the practical, viva and clinical examinations will be “Objective Structured Practical Examination” OSPE & OSCE.

FOR QUERIES PLEASE CONTACT ON

Email: admissions@duhs.edu.pk
Tell No. (009221)-2732194
Website: www.duhs.edu.pk
CONSTITUENT INSTITUTES and COLLEGES of Dow University of Health Sciences

1. Dow Medical College (DMC)
2. Sindh Medical College (SMC)
3. Dow International Medical College (DIMC)
4. Dr. Ishrat-Ul-Ebad Khan Institute of Oral Health Sciences (DIKIOHS) For MBBS
5. Dow College of Pharmacy (DCOP) For Pharm-D
6. Institute of Health Management (IHM) For MBA in Hospital Administration, Health Care Management & Pharmaceutical Sciences
7. Institute of Basic Medical Sciences (IBMS) For MPhill and PhD
8. Institute of Medical Technology (IMT) For Bachelors in Clinical Pathology, Critical Care, Operation theatre and Ophthalmology
9. Institute of Physical Medicine & Rehabilitation (IPMR) For Bachelors in Occupational Therapy & Masters in Physiotherapy
10. School of Orthosis and Prosthesis For Bachelors in Orthosis and Prosthesis
11. Institute of Nursing (ION) For Post RNBSc
12. School of Dental Care Professionals (DCP) For Diploma in Dental Technology & Dental Hygiene
13. Vocational Training Centre (VTC) For Skilled Training
14. National Institute of Diabetes and Endocrinology (NIDE) For Masters in Diabetes & Endocrinology
15. National Institute of Liver and GI Diseases (NILGID) PG Courses to be started soon
16. Department of Biostatistics and Epidemiology For Masters in Biostatistics and Epidemiology
17. Department of Jurisprudence For Masters in Medical Jurisprudence
18. Research Department For PhD

New Academic Block (Dow University)
Dr. Ishrat-ul-Ebad Khan Institute of Oral Health Sciences (Dow University)
Institute of Nursing (Dow University)