GLOBAL NEED OF MEDICAL TECHNOLOGISTS

The highly qualified physicians and surgeons are available in all subspecialties and they are providing quality education and patient care to the best of their ability. Unfortunately, due to the lack of trained and qualified technical human resources, their efforts face a dead lock which effects the quality of patient care especially while saving critically ill patients in emergency and disastrous situations.

Since Pakistan is now on the track of developing countries and we are witnessing promising trends in health care system, it is highly essential for us at a critical timeline like this to recognize the greater demand of highly-skilled and trained workforce, which is probably one of the greatest economical and developmental struggle ever. Therefore we just cannot relax, let this critical time pass and just maintain what we already have.

Merely maintaining what we have is like leaving the people of this region with much less in the long run. We are the pioneers in introducing these technologies for the first time in Pakistan. We having this awareness, have much greater obligation to this region in particular and to the Pakistan in general.

“Saving one human life is like saving humanity” is our vision. D U H S recognizes the long-term value of bringing
an academic health care environment to the people of Pakistan. Thus in the long run we will achieve our vision of bolstering up the economy and meet the country's shortage of highly trained allied health professionals. Medical Technology is a vital part of the entire Health Care System. This professional field comprises the challenges and rewards of medicine and surgery, and deals with technical aspect of the same. It has foundations in basic sciences. Medical technologists are vital members of Health Care System, and eminent professional resource of health care team, who play their active role in medical institutions, hospitals, physicians' offices, diagnostic centers and other health care facilities in public and private sectors.

This program focuses on the development of scholarly activities designed to develop and advance competencies in clinical skills, critical thinking, and problem solving skills. Maintenance and practice of ethical standards as well as development of collaborative perspective toward education and proper management and persistent goal oriented efforts, are also integral part of the program.

Our program is providing undergraduate training in this field for students pursuing their career in Paramedical and Allied Health Sciences.

The medical technology program at DUHS offers 2 year Associate in Applied Sciences diploma and a 4-year Bachelor of Sciences degree. During the first two years the program, comprises of courses in general education, communication skills, basic medical sciences and concerned technical sciences along with clinical practicum conducted in approved and affiliated teaching facilities. Successful candidates are given the opportunity to pursue their career for further two years to complete bachelors program. Further two-year program focuses on advanced clinical sciences, clinical practice and technical skills.

Undergraduate Programs are offered in following different technologies:
- Clinical Laboratory Sciences
- Respiratory & Critical Care Technology
- Surgical Technology
- Ophthalmic technology.
- Cardiovascular Perfusion Sciences

Currently over 385 students are enrolled in this program. Third batch has graduated in January '2012. We make sure our students are receiving accurate, current, and comprehensive information. Our faculty's advisory committee also visits clinical programs to make sure we stay updated with latest developments.

Graduates of this program are becoming the vital part of health care team and will prove to be the backbone of the entire health care system in the country. They will have enormous employment opportunities here and aboard. Graduates of this program may continue their education, by pursuing for Masters, M.Phil & PhD Program in related fields. They also fulfill the premedical criteria for international M.D. Program abroad.
INAUGURATION OF INSTITUTE OF MEDICAL TECHNOLOGY

The Institute of Medical Technology was inaugurated by Dr. Ishrat-ul-Ebad Khan, Governor of Sindh and Chancellor of DUHS. Prof. Masood Hameed Khan, Vice Chancellor Dow University of Health Sciences briefed the audience about aims and objectives of this Institute. He also briefly mentioned about the projects completed during the previous years and the projects to be completed in the near future. The inaugural ceremony was attended by the faculty members and many distinguished guests of Health care sector.
ACADEMIC ACTIVITIES
OF
INSTITUTE OF MEDICAL TECHNOLOGY (IMT)

The vision of the Vice Chancellor to develop human resources in the field of Medical Technology transformed into reality in April 2005. Institute is housed in the renovated building near main campus of DUHS, infront of Karachi College for Women at Chand Bibi Road, behind Civil Hospital Karachi. The Institute is located in the congenial atmosphere and well equipped, air conditioned lecture halls, having audio visual multimedia facilities. A reading library and (26) station digital library is fully functional.

2008 PROGRESS

3rd batch of four years B.S. Program in the field of Clinical Pathology, Critical Care, Operation Theatre and Ophthalmology was inducted in Jan. 2008, after the entry test and interview. Theory classes were held daily from 8:30 a.m. to 2:00 p.m. Lectures were conducted according to the schedule. These lectures were taken by highly qualified teachers of the specific fields. Practical training was conducted in the laboratories, Operation theatre and Intensive care units at OJHA Institute of Chest Diseases, Civil Hospital Karachi, and other affiliated public & private sector teaching Institutes.

During the first semester (Jan-June, 2008)of 1st year, 2nd year and 3rd year, punctuality and regularity of the students and teachers were strictly monitored. Eighteen (18) weeks of academic session was completed on scheduled time. Midterm examination was conducted during the Seventh (7th) week of the session.

Final examination was conducted after Sixteen (16) weeks of the semester and the result was announced a month later.

2nd year and 3rd year students completed their clinical practicum in civil hospital, OICD and other affiliated hospitals, in respective fields.

All semesters were completed in the last week of June. Before summer break, all students were given assignment of one month. 1st year students were offered English and Computer classes, students of 2nd year and 3rd year were sent to their respective clinical rotations.

After summer break second semester of 1st, 2nd and 3rd year started on Sept 1st, 2008. session was completed in last week of Dec. 2008
Progress Report 2009

Academics:
- 85 students were inducted in 4th batch of DIMT for session 2009 in all four (04) technologies in December 2008.
- Spring semester of all batches (i.e. semester I, III, V, and VII) was started in 3rd week of January 2009.
- Currently total 385 students are enrolled in all 4 batches. All sessions are currently on schedule.
- Fall semester of all batches started in 3rd week of August.
- 1st batch (2006) of about 82 students will be graduating in Dec 2009. They will be awarded 4 year B. S. degree.
- Several Guest lectures and workshops were arranged throughout the session.
- Clinical pathology laboratory has been setup recently and will be functional soon.
- Quality enhancement team of DIMT is actively coordinating with QEC of DUHS.
- Following Institutes of Karachi are fully supportive and cooperative to offer clinical practicum to our students of all technologies.
  - DDRRL, DUHS.
  - Ojha Hospital Laboratory
  - Civil Hospital, Karachi.
  - Jinnah Post Graduate Medical Centre.
  - Abbasi Shaheed Hospital.
  - National Institute of Child Health.
  - LRBT.
  - Al-Ibraheem Eye Hospital.
  - Darul Sehat Hospital.
  - Akhtar Eye Hospital.
  - Hashmani Hospital.
  - Patel Hospital.
  - Essa Laboratories.
  - Spencer Eye Hospital.
  - Tabba Heart Institute.
  - NIBD.
- 4 weeks of intense training is provided to all students of each technology at the end of each semester.
  Student’s progress and performance is very well appreciated from all institutes.
Progress Report 2010

Academics:
- 85 students were inducted in 5th batch of DIMT for session 2010 in all four (04) technologies in December 2009.
- Spring semester of all batches (i.e. semester I, III, V, and VII) was started in 3rd week of January 2010.
- Currently total 385 students are enrolled in all 4 batches. All sessions are currently on schedule.
- 1st batch of 85 students, inducted in 2006 session, graduated in January 2010. Consolidated mark sheets and B.S. degrees are issued to all graduates. All graduates of the batch have been inducted for 6 months paid INTERNSHIP at Civil Hospital Karachi, in their respective technologies.
- Fall Semester (i.e. semester II, IV, VI & VIII) started in 2nd week of September 2010.
- 2nd batch, inducted in 2007, is expected to graduate with B.S degree in January 2011.
- Ophthalmic Technology and Clinical Pathology Laboratories have been established on premesis.
- Quality enhancement team of DIMT is actively participating and coordinating with QEC of DUHS.
- 4 weeks of intense training is provided as per schedule at the end of each semester to students of all technologies, as mentioned in 2009 report.
Progress Report 2011

Academics
- 80 students were inducted in 5th batch of DIMT for session 2011 in all five (05) technologies in December 2010.
- Terminal examination of spring semester was held on 17/01/2011.
- Spring semester of all batches (i.e. semester I, III, IV and VII) was started in 3rd week of January 2011.
- Mid Term examinations of spring & fall semester were held on 03/03/2011.
- Retake examination of all semesters were held on 21/04/2011.
- Clinical Practicums of I, III, V and VII semesters were arranged for 4 weeks duration from 18/04/2011 to 14/05/2011.
- Following Institutes of Karachi are fully supportive and cooperative to offer clinical practicum to our students of all technologies.
  - Civil Hospital, Karachi.
  - Jinnah Post Graduate Medical Centre.
  - Abbasi Shaheed Hospital.
  - National Institute of Child Health.
  - LRBT.
  - Al-Ibraheem Eye Hospital.
  - Darul Sehat Hospital.
  - Akhtar Eye Hospital.
  - Hashmani Hospital.
  - Patel Hospital.
  - DDRL, DUHS.
  - Essa Laboratories.
  - Spencer Eye Hospital.
  - Tabba Heart Institute.
  - NIBD.
- Terminal examinations were held on 30th May 2011.
- 4 weeks of intense training is provided to all students of each technology at the end of each semester.
- All graduates of 2010 from all technologies are offered 6 months internship at DUHS affiliated hospitals (July 1st – Dec 1st, 2011)

- Fall semester was started on 24th September, 2011
- Mid Term Examination of fall semester were held on 17th October, 2011.

Student’s progress and performance is very well appreciated from all institutes.

**Calendar of Co-Curricular Activities 2011 of Dow Institute of Medical Technology.**

- **Jan 24 - Feb 7, 2011**: DUHS Sports week.
- **February 14, 2011**: Quiz competition of Ophthalmic Technology.
- **March 15, 2011**: Visual Assessment Program.
- **March, 2011**: Eye camp at khaliqdeena School.
- **March, 2011**: Health walk on health day at sea view, Clifton, Karachi.
- **April, 2011**: Walk on TB day at ojha campus, DUHS.
- **May 5th, 2011**: National pathology week at Ziauddin University, Clifton and DIMT students received 1st prize on this program.
- **May 13th, 2011**: Faiez H. Sayyal – delivered guest lecture on “MANNERS” at DIMT.
- **September 30th, 2011**: Vice Chancellor, DUHS visited for Zakat and donation fund.
- **October 26th, 2011**: Certificate distribution ceremony of sports week.
Calendar of Extra Curricular Activities.

IMT students actively participated in following extra curricular activities and received appreciation and several awards & certificates.
- February 1st - February 7th 2010......................... DUHS Sports Week
- February 17th 2010....................................... Farewell Party to graduating abtch
- April 2nd - April 7th 2010 ................................ Health Asia Expo
- April 18th 2010............................................. Annual IMT Picnic
- April 21st 2010............................................. Poster Competition, IMT
- August 10th - August 14th 2010....................... DUHS Independence Day Celebration
- August 18th 2010........................................... Initiated Flood Relief Camp
- October 10th 2010 ........................................ Walk through Inauguration of Ophthalmic Technology Laboratory by Prof. M. Umar Farooq, Pro-Vice Chancellor, DUHS

Spring semester of 2011 will start in last week of January 2011.
**Progress Report 2012**

**Academics**

- 66 students were inducted in 7th batch of DIMT for session 2012 in all five (05) technologies in January 2012
- Terminal examination of fall semester was held on 16-1-2012
- Spring semester of all batches (i.e. semester I,III,IV and VII) was started in 1st week of February 2012.
- Mid term examinations of spring & fall semester were held on 28-3-2012
- Retake examination of all add semesters were held on 29-2-2012.
- Retake examination of all Even semesters were held on 19-3-2012
- Clinical Practicums of I, III, V and VII semesters were arranged for 4 weeks duration from 2-5-2012 to 26-5-2012
- Terminal examination of spring semester was held on 4-6-2012
- Following Institutes of Karachi are fully supportive and cooperative to offer clinical practicum to our students of all technologies.
  - Civil Hospital Karachi
  - Jinnah Post Graduate Medical Centre.
  - Abbasi Shaheed Hospital national Institute of Child Health
  - LRBT
  - Al-Ibraheem Eye Hospital
  - Darul Sehat Hospital
  - Hashmani Hospital
  - Patel Hospital
  - DDRL, DUHS
  - Essa Laboratories
  - Spencer Eye Hospital
  - Hussaini Blood bank
  - Tabba Heart Institute
  - NIBD
- Terminal examinations were held on 4th June 2012
- 4 weeks of intense training is provided to all students of each technology at the end of each semester.
- All graduates of 2011 from all technologies are offered 6 months internship at DUHS affiliated hospitals (July 1st – Dec 31st, 2012)
- Fall semester was started on 10th September, 2012

Students progress and performance is very well appreciated from all institutes.

**Calendar of Co-Curricular Activities 2012 of Dow Institute of Medical Technology**

- Feb 27-Mar 10, 2012  DUHS Sports week
- March 15, 2012  Fare Well Party of Batch 2008
- Eye Camp at DIMT  28-4-2012
- Yearly Picnic of DIMT  29-4-2012
PROGRAMS

A) Four Year B.S (Bachelor’s of Science) Program in Medical Technology is offered in following disciplines:

- CLINICAL LABORATORY SCIENCES
- SURGICAL TECHNOLOGY
- RESPIRATORY & CRITICAL CARE
- CLINICAL OPHTHALMIC TECHNOLOGY
- PERFUSION SCIENCES

After successful completion and qualifying examination of 4th semester (2 years) candidate may choose to receive DIPLOMA OF ASSOCIATE IN MEDICAL TECHNOLOGY
And they will have the option to exit the program OR continue for Bachelors Course, for further 2 years.

B) Postgraduate Certificate Course is offered in the following field:

<table>
<thead>
<tr>
<th>Course</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ULTRASONOGRAPHY</td>
<td>6 months</td>
</tr>
<tr>
<td>ECHOCARDIOGRAPHY</td>
<td>1 year</td>
</tr>
</tbody>
</table>
SYLLABUS OUTLINE

(A) Bachelor’s of Science (B.S) in Medical Technology
(Four year program)

CORE COURSES (COMMON TO ALL PROGRAMS)

- Basic computer skills
- English proficiency
- Behavioral sciences
- Research Methodology
- Fundamentals of Health Care Management
- Basic Medical Sciences (Fundamentals)
  - Anatomy
  - Physiology
  - Microbiology
  - Biochemistry
  - Pathology
  - Pharmacology
SYLLABUS OUTLINE ...... cont.

Bachelor’s of Science (B.S) in Medical Technology
(Four year program)

SPECIFIC COURSES

1. Clinical Laboratory Sciences:
   - Medical Terminology for Clinical Pathology
   - Infection Control
   - Introduction to Pathology Lab Technology (PLT) & Histopathology I/II
   - Principles & Procedures of Pathology Lab Technologists (PLT) I/II
   - Clinical Biochemistry I/II
   - Immunology I/II
   - Diagnostic Microbiology I/II
   - Immuno-Haematology
   - Haematology I/II
   - Transfusion Medicine
   - Molecular Biology
   - Clinical Microtechniques and Cytology
   - Understanding Research Principles & Scientific Methods
   - Body Fluids Analysis
   - Laboratory Science Standards, Quality Assurance & Professional Leadership
   - Clinical Practicum I - VIII

2. Surgical Technology:
   - Medical Terminology for Surgical Technology
   - Infection Control
   - Introduction to Operation Theatre Technology I / II
   - Introduction to Surgical Instrument I /II
   - Fundamentals of Operation Theatre Procedures I /II
   - Applied Pharmacology
   - Operation Theatre Equipments and Physics
   - Applied pathophysiology I/II
   - Pre and post operative assessment & management
   - Project Assignment I/II
   - Clinical Practicum I - VIII
SYLLABUS OUTLINE …… cont.

Bachelor’s of Science (B.S) in Medical Technology (Four year program)

(B) SPECIFIC COURSES

3. Respiratory & Critical Care:
   - Medical Terminology of Critical Care
   - Infection Control
   - Applied cardio- pulmonary pathophysiology I/II
   - Applied Pharmacology
   - Cardio-Pulmonary diagnostics I /II
   - Introduction to critical care I /II
   - Fundamentals of Respiratory and Cardiac care
   - Advance Respiratory and Cardiac care
   - Introduction to critical care medical equipments I/II
   - Basic and Advance Cardiac Life Support
   - Advance Principles & Techniques
   - Procedures & Therapeutic Interventions I/II
   - Clinical Practicum I - VIII

4. Clinical Ophthalmic Technology:
   - Medical Terminology for Ophthalmology
   - Infection Control
   - Fundamentals of Ophthalmic Technology I/II
   - Ocular Physiology I /II
   - Common Ophthalmic Disorders I/II
   - Community Eye Care I/II
   - Diagnosis & Management of Common Eye Disorders I/II
   - Clinical Skills, Eye Examination and Nursing Care
   - Advance Refraction techniques
   - Dispensing Optics and Contact lenses
   - Advance Visual Functions
   - Applied Ophthalmic Pharmacology
   - Clinical Practicum I - VIII

5. Perfusion Sciences:
   For further details undergraduate schedule refer to page 47.
B) POST GRADUATE CERTIFICATE PROGRAM
SYLLABUS OUTLINE

<table>
<thead>
<tr>
<th>(1) Ultrasonology</th>
<th>(2) Echocardiography</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pulse echo imaging &amp; signal processing</td>
<td>• Foundations of Echocardiography</td>
</tr>
<tr>
<td>• Transducers</td>
<td>• Cardiovascular Anatomy &amp; Physiology</td>
</tr>
<tr>
<td>• Scanning techniques</td>
<td>• Adult Echocardiography I</td>
</tr>
<tr>
<td>• Measurement</td>
<td>• Physics I</td>
</tr>
<tr>
<td>• Image recording and storing</td>
<td>• Clinical Practicum I</td>
</tr>
<tr>
<td>• Doppler imaging</td>
<td>• Special Procedures</td>
</tr>
<tr>
<td>• Artefacts</td>
<td>• Advanced Concepts</td>
</tr>
<tr>
<td></td>
<td>• Adult Echocardiography II</td>
</tr>
<tr>
<td></td>
<td>• Stress Echocardiography</td>
</tr>
<tr>
<td></td>
<td>• Physics II</td>
</tr>
<tr>
<td></td>
<td>• Cardiovascular Anatomy &amp; Physiology II</td>
</tr>
<tr>
<td></td>
<td>• Congenital Heart Disease</td>
</tr>
<tr>
<td></td>
<td>• Clinical Practicum II</td>
</tr>
</tbody>
</table>

**Academic schedule:** Based on semester system for details of schedule and GPA requirements refer to undergraduate schedule.

**Allocation of seats:**
Ultrasonology 10

**Eligibility:** The minimum qualification for a candidate to appear in the entrance test is
- MBBS with 1 year house job (Medical & Surgery)

Entry test will be based on MBBS level Anatomy, Physiology and Applied pathophysiology.

**Documents Required:** Following documents should be submitted, attested by a government officer (BPS-18 or above).
- Current PMD&C registration.
- MBBS degree from a recognized Institute.
- The candidates computerized National Identity Card.
- Six passport size photographs.

**Payment of Fee**
- Ultrasonology .................Rs. 60,000/= per course
PRACTICALS (Laboratories)

SKILL’S LABS

CLINICAL LABORATORY SCIENCES & OPHTHALMIC TECHNOLOGY
The state of art skill’s lab is established at the Institute of Medical Technology with latest and sophisticated models and full line of medical equipments under supervision of experienced medical technologist.
Before clinical training at affiliated hospitals every student will receive extensive hands on training in relevant skills in the skill’s lab under supervision of faculty. Critical care and operation theater technology students are currently at PDC skills lab.

COMPUTER LAB
The Computer lab with 26 latest systems is fully operational. The computer lab offers following facilities.

1. **Computer Courses:** Interactive lectures on basic computer skills such as MS- Word, Excel, PowerPoint, MS- Outlook express.
2. **Internet Facility:** We give our students better chance to browse Medical Information, Current Updates, Research Articles or Concerned Topics.
3. **Hands-on Training:** Students are given opportunity to apply their skills and thereby receive hands-on training and learn extensively to the best of their ability.
4. **Multimedia:** Presentations and lectures are delivered through latest audiovisual aid.
5. **Internet Training:** Internet training is being given to the students in terms of sharing documents, protecting them online, difference between Intranet and Internet etc.
ACADEMIC SCHEDULE

BACHELOR OF SCIENCE IN MEDICAL TECHNOLOGY will be awarded after successful completion of Eight semesters (> 124 credit hours in 4 years)

DIPLOMA OF ASSOCIATE IN MEDICAL TECHNOLOGY will be awarded after successful completion of four semesters (> 64 credit hours in 2 years)

CERTIFICATE IN CONCERNED COURSES will be awarded after successful completion

An Academic year will be divided into TWO SEMESTERS. Each semester will be of 18 Weeks Duration, the break up will be as follows:

- Pre semester admissions ..................................................02 weeks
- First (Spring) Semester teaching and examinations .....18 weeks
- *Inter semester break (Winter) .................................04 weeks
- Second (Fall) Semester teaching and examinations .....18 weeks
- *Session break (Summer) ..................................................10 weeks

*The date of the commencement of each semester will be notified. During Inter semester break and session break students will be able to cover up their deficiencies of previous semester by various projects and practicals. Clinical practicum may also be assigned.
# GRADE/GPA REQUIREMENT FOR EACH SEMESTER & GRADUATION

<table>
<thead>
<tr>
<th>GRADE</th>
<th>PERCENTAGE</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>80% to 100%</td>
<td>4.0</td>
</tr>
<tr>
<td>A</td>
<td>75% to 79%</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>70% to 74%</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>67% to 69%</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>60% to 66%</td>
<td>3.0</td>
</tr>
<tr>
<td>C+</td>
<td>56% to 59%</td>
<td>2.9</td>
</tr>
<tr>
<td>C</td>
<td>50% to 55%</td>
<td>2.0</td>
</tr>
<tr>
<td>F</td>
<td>(&lt; 50%) Fail</td>
<td>below 2.00</td>
</tr>
</tbody>
</table>

Fractional Grade Point Average will be calculated according to approved rules
ADMISSION PROCEDURE
FOR ALLIED HEALTH SCIENCES
IMT / DCP
DOW UNIVERSITY OF HEALTH SCIENCES

1. SELECTION BOARD:
   CHAIRMAN: Professor Muhammad Umer Farooq
   MEMBERS:
   1. Prof. Junaid Ashraf, Principal, Dow Medical College
   2. Prof. Saud Ahmed, Vice Principal, Dow Medical College
   3. Prof. Rana Qamar Masood, Coordinator Admissions, DUHS
   4. Prof. Zeenat Ayoob, Registrar, DUHS
   5. Dr. Syed Muhammad Idrees, Director Admissions DUHS
   6. Dr. Syed Sarwat Hassan, Principal & Director Institute of Medical Technology (IMT)
   7. Dr. Nabila Soomro, Director Institute of Physical Medicine & Rehabilitation (IPM&R)
   8. Dr. Anwar Ali, Program Director School of Dental Care Professionals (DCP)
   9. Dr. Nadeem Shafiq, Assistant Registrar, Rules & Regulations, DUHS
   The selection board shall have the discretion to refuse admission to any candidate, who indulges in violence, uses abusive language, becomes insolent or misbehaves with the members of the selection board.
   The selection Board shall not consider any candidate, for admission if he or she is found to be involved in any form of unfair means / fraud at any stage of admission / selection.
   In case of any controversy or query, the decision of the selection board shall be final.

2. ALLOCATION OF SEATS: (Open Merit for both Males & Females)
   INSTITUTE OF MEDICAL TECHNOLOGY (IMT)
   For Four Year Bachelors Program
   a) Clinical Laboratory Sciences........50
   b) Respiratory & Critical Care........25
   c) Surgical Technology...............25
   d) Clinical Ophthalmic Technology ...........................................10
   e) Perfusion Sciences.................08
   SCHOOL OF DENTAL CARE PROFESSIONALS (DCP)
   For Four Year Bachelors Program
   a) Dental Technology............14
   b) Dental Hygienist...............14

3. APPLICATION FORM:
   - Online application forms will be available for admission in Bachelors Program in all above mentioned disciplines.
   - Prospectus along with admit card form will be available at United Bank Limited (UBL) Baha-e-Urdu Road, Branch, Karachi.
   - Printed copy of online application and other required documents, mentioned in the prospectus must be submitted at the same UBL branch.
   - Candidates may apply for more than one program (undergraduates only) indicating their priority in the application form.

4. ENTRANCE TEST:
   - The Dow University of Health Sciences Karachi, will conduct the Entrance Test on the specified date and venue.
   - All the eligible candidates applying for any category of seats will have to appear in the Entrance Test.
   - The Entrance Test will be valid only for admission in the current session.
   - Admit cards for the Entrance Test will be issued to the eligible candidates few days prior to the test and dispatched by courier service.

5. ELIGIBILITY FOR ENTRANCE TEST:
   - The minimum qualification for a candidate to appear in the entrance test is the intermediate science (pre-medical) or equivalent examination.
   - Candidates, obtaining aggregate marks, less than
60% in intermediate science or equivalent examination are NOT eligible.
- Candidates who have passed BSc (in any subject) can also apply, however, marks only of intermediate science or equivalent examination will be considered for merit calculation.
- Candidate must be a permanent resident of Sindh.

**Entrance Test (Undergraduates Programs):**
The test will be comprised of following subjects:
1) Biology/Maths...25 Questions
2) Chemistry........25 Questions
3) Physics...........25 Questions
4) English.............25 Questions

Based on current syllabus of the Board of Intermediate and Secondary Education Karachi.

**6. DOCUMENTS REQUIRED:**
Photocopy of the following documents should be submitted, attested by a Government officer in grade 18 or above.
1) **Matric Certificate** from Board of Secondary Education.
2) **Matric Marks Sheet.**
3) **Intermediate Science Marks Sheet** or Transcript of Equivalent examination.
4) BSc Degree (if applicable)
5) Candidates Domicile of Sindh Province.
6) Permanent Residence Certificate of applicant (form-C) in accordance with Law/Rules.
7) Domicile Certificate of Father, from Province of Sindh (any district) except Employees of Federal Government / Armed force personnel. The Domicile Certificate of mother shall only be accepted in case where father has expired and no domicile certificate was issued to him or there has been remarriage/separation for which a valid document from the Judge of the high Court has been produced. Domicile Certificate of the candidate can also be accepted if he/she has attained the age of 21 years or both the parents are not alive (statement supported by death certificate) and no domicile certificate was issued to them. In case of married female candidates the domicile of the husband will be acceptable provided the domicile of the husband and PRC of the candidate belongs to the district in the Province of Sindh. Any candidate found using domicile/PRC of more than one district / place in Pakistan shall be disqualified for admission, and the case will be referred to authorities for investigation.
8) The candidate’s National Identity Card (or 'B' form if he/she is below the age of eighteen years).
9) NADRA Identity Card of Father with permanent address of Sindh.
10) Six passport size photographs with name, 3 attested from on front and 3 attested from back.

**7. MERIT FORMULATION:**
The following marks shall be added or deducted from the total marks of the candidates for merit formulation.
- Addition of 20 marks to all candidates having BSc (in any subject) from a University recognized by HEC.
- Deduction of 10 marks per year after scheduled Intermediate science for every extra year.

**Note:** The minimum required specified period to pass intermediate science (Pre-Medical), examination is 2 years after the matric examination. Any period beyond this will be treated as an extra attempt, whether availed or unavailed.

**WEIGHTAGE OF MARKS:**
Merit List will be prepared according to the following weightage of marks obtained by candidates:
- Matric or Equivalent Examination Marks........10% weightage
- Intermediate or Equivalent Examination Marks....40% weightage
  (In the theory subjects of Physics/Math, Chemistry and Biology)
- Entrance Test........50% weightage

**Example:** If any candidate has obtained the following marks:
- Matric or Equivalent examination 76.47% (A)
- Intermediate or Equivalent examination 79.09% (B)
- Entry Test Marks 75% (C)
His/Her merit will be calculated as follows:
Percentage marks x weightage factor = weighted marks
A) Matric or Equivalent examination 10% weightage as 76.47 x 0.1 = 7.65%
B) Intermediate or Equivalent examination 40% weightage as 79% x 0.4 = 31.60%
C) Entry test 50% weightage as 75% x 0.5 = 37.50
Total = A + B + C = 76.75% (This will be the final percentage considered for merit)
Note: All calculations in percentage will be done in three decimals.

IMPORTANT:

i) In case the overall score of two or more candidates are equal, the candidate securing higher marks in the Intermediate examination or equivalent exam shall be ranked higher in the merit for the purpose of admission.

ii) If the Inter marks are also equal, the candidate having higher marks in the Matric or equivalent examination shall be ranked higher in the merit for the purpose of admission.

iii) If the matric marks of two or more than two candidates are also equal than the candidate older in age shall be ranked higher in the merit for the purpose of admission.

INITIAL MERIT LIST
- The Chairman of the selection board will finalize the initial merit list. The list will be displayed on the website of the university. www.duhs.edu.pk
- The initial merit list is liable to be changed due to correction of errors and no candidate can claim his/her merit on the basis of initial merit list.
- After correction of errors FINAL MERIT LIST will be displayed on the website. Admissions will be given on the basis of Final Merit List.

FINAL MERIT LIST
- Candidates will be called as per merit for final allocation of seats on the specified date and venue mentioned on the website. Seats will be allocated on merit cum choice basis after verification of original documents and submission of required payorder (non refundable) for admission and fee for first two semesters.
- Candidates who fail to report on the specified date for seat allocation after verification of documents and submission of payorder WILL NOT be considered for admission and the seat will be given to the next candidate on merit. Thereafter the absent candidate will not to be able to claim his merit.
- If at any stage it is proved that the candidate has been admitted on the basis of false/incorrect documents or information against the rules of admission, his/her admission shall be cancelled immediately by the University, after giving him/her an opportunity through a show cause notice and receiving a reply within seven days. The entire fees paid by him/her shall be forfeited and the University will have the right to take any legal action against him/her as per law.
- If any candidate submits false documents or provides incorrect or false information, he will be debarred from the university immediately and shall also be liable to prosecution for forgery. Any case of fraud or tampered document will be notified. Such candidate will be debarred from getting admission in any constituent institution for three years and will be imposed a fine of Rs. 5000/= after a show Cause Notice of Seven Days. Starting date of the semester will be considered as the first day of the academic session.
8. VACANT SEATS:
- The seats, which remain vacant will be filled by admitting the next candidate on merit.
- Any seat falling vacant 30 days after the start of semester shall not be filled and shall stand forfeited.
The provision made in this prospectus are liable to be modified, relaxed or amended by the University from time to time, and such changes shall be applicable to all concerned and will be notified.

IMPORTANT NOTE:
Candidates of final Merit List will have to come alongwith:
- ORIGINAL DOCUMENTS (Photo copies of which were submitted).
- PAYORDER of Rs. 52,160/- (Fifty two thousand One hundred sixty Rupees) in favour of Dow University of Health Sciences, Karachi.
- Father / Mother / Guardian.
On the date and venue specified with the announcement of Final Merit List on the website.

AT DOW MEDICAL COLLEGE (DUHS) M.A. JINNAH ROAD, BABA-E-URDU ROAD, KARACHI.

DOW UNIVERSITY DISCIPLINARY ACT
1. All institutes of Dow University will have a disciplinary committee to deal with all disciplinary matters.
2. The disciplinary committee of the Institute is empowered to take any disciplinary action on cases reported by the Director of the respective institute.
3. Any student who's name appears in the F.I.R. pertaining to any non-bailable offence as specified in the criminal procedure code (Cr.P.C.) will be suspended. During the pendency of the case he/she will not be allowed to attend classes or take up any examination.
4. The action for situation warranting suspension, rustication or expulsion will be according to the specified procedures as follows:

PROCEDURE
a) The Director may initiate action against any student of the Institute and recommend the case to the disciplinary committee of the Institute for suspension, rustication or expulsion, as the case may be.
b) Before taking any action, the Director shall serve a show cause notice to the student indicating briefly the charges against him. The concerned student will have to give a written reply within seven days after which action will be finalized by the disciplinary committee, then the student will not be entitled to personal hearing.

STUDENTS CONDUCT RULES
1. No student shall form any society/ association / organization.
2. No outside person will be invited by the students to address any meeting of the Institute.
3. Students union will not be formed without the prior permission of the Director of the Institute.
4. The Director can issue disciplinary orders of permanent or temporary nature from time to time to regulate the conduct of the students within the Institute.
5. Students will not be permitted to do any job, such cases will be reported to the disciplinary committee.
6. If any student wants to publish his literary article, he/she must get the approval of the draft by the Principal/Director and also required to submit the copy of the draft for record purposes.
7. Students will not be allowed to address the national press on any of the following topics:
   a) Any Politically related issues.
   b) Matters directly or indirectly connected with the administration of the Institute.
   c) Matters pertaining to the policies of Government.
8. Students are forbidden to address higher authorities directly. Any communication intended for higher authorities needs to be routed through the Director.
9. Smoking, use of drugs and other activities prejudicial to the conduct of the class are prohibited.

**SUSPENSION**

A student shall be liable for suspension upto six months if he/she commits any of the following acts:-

1. Uses unfair means during examination:-
   The Director can suspend any student who is found indulged in unfair means during examination. Further action against him will be taken by the committee for breach of the rules and regulations. He/She will not be allowed to appear in the remaining papers for the examination till the final decision by the committee.

2. Misbehaves or quarrels with any teacher or member of the staff.

3. Is generally disobedient.

4. Spreads false rumours.

5. Uses unbecoming, indecent or filthy language.

6. Incites other students to violence.

7. Is inappropriately dressed.

8. Shouts, abuses, quarrels or fights with the fellow students.

9. Raises slogans to hurt others, politically or religiously.

10. Interferes with the administration, including the mode or schedule of the examination.

11. Indulges in acts of immorality.

12. Indulges in any kind of political activity including displaying posters or playcards within the Institute.

13. Remains absent continuously for more than 4 weeks without prior permission.

**RUSTICATION**

A student may be rusticated by the disciplinary committee of the Institute for a period upto 3 years due to any of the following acts:-

1. Taking forceful possession, making unauthorized use or damaging any University/Institute property.

2. Involving himself in any agitational activity.

3. Found indulging in activities, prejudicial and detrimental to the good order of the Institute.

4. Adopting unfair means during examination.

5. Disobeying an order of suspension passed against him/her.

6. Any other act, which the Director or the disciplinary committee considers inappropriate.

7. Anybody who does not submit the prescribed undertaking about non-involvement in political activities.

**NOTE :-**

Any student suspended or rusticated for the reasons mentioned above shall not be allowed to appear in the examinations.

**EXPULSION**

A student is liable to be expelled from the Institute by the disciplinary committee, if he/she commits any of the following acts and this order shall be final and irrevocable. If he/she:

1. Is found in possession of fire arms or lethal weapons or Narcotic drugs in the Institute premises, hostels, examination halls, teaching hospital or any other area as specified by the University administration.

2. Remains absent for more than three months without permission of the Director, his / her admission shall be cancelled by the disciplinary committee of the Institute.

3. Is convicted by a court of law for any criminal act.

**RULES AND REGULATIONS**

1. Attendance will be taken separately during theory classes, practicals and subject training, separately.

2. 90% attendance is mandatory to be eligible for examination.

3. Leave applications are not only necessary for the purpose of attendance but also for information about health and whereabouts of the student.
4. Any student who is absent for seven days or more from the lectures, demonstrations or subject training without prior permission will not be able to continue the course.

5. Leave applications must be submitted three days prior to the date of availing leave, except for emergency leave.

6. The student must display the identity card, issued by the DUHS, while in the premises of the institute/affiliated hospitals.

ELIGIBILITY FOR EXAMINATION

All candidates must fulfill the following criteria to be eligible for the examination.

1. Student must acquire 90% attendance separately in theory, practical demonstrations and subject training.
2. If any disciplinary action is taken against any student, he will not be eligible to appear in the examination.
3. Student who does not appear in the mid term examination will not be allowed to appear in the final examination.
4. Any student who fails in the mid term examination will have to retake that examination.

ACADEMIC RECORD

1. Academic record of every student will be maintained by the Institute.
2. The progress of the student or the academic record will be communicated to their parents / guardian
3. Minimum passing marks are 50% separately in theory and practical.

LIBRARY

1. The library will remain open on every working day during the prescribed hours and the students will have to follow the rules of the library.
2. Books and journals will be issued to the students only after deposit of their identity cards with the librarian, which will be returned after the books are returned.
3. Students are not permitted to take the books outside the library.
4. The book card placed (in the end of the book), must be delivered to the librarian after signature, before the book is taken away while at the time of returning the book, check that the card is promptly replaced with return entries.
5. Any student, who loses, defaces or otherwise seriously damages any book is liable to replace the same or pay the cost of replacement and if the book is one of the set or series, the cost of the whole set or series will be charged from the concerned student.
6. Any text book, reference book, encyclopedia, dictionary or any magazine will not be issued to any student.
7. A suggestion book is available in the library, where in suggestions can be made by the students.
8. Students can have books from the lending library which will be organized by the students themselves under the guidance of university administration.

IDENTITY CARD

After admission every student will be issued a non-transferable identity card having a photo duly signed by the Director, this card must be kept by the student within the premises. Duplicate cards will not be issued except under special circumstances and after payment of Rs. 100 only.

DECLARATION/UNDERTAKING / AFFIDAVIT ON STAMP PAPER

To be produced once seat is allocated

I. ____________S/o, D/o__________ selected for the Bachelor Course in the Institute of DUHS, Karachi in the subject: ____________ declare that

1. I will abide by rules and regulation of this Institute enforced OR. As amended from time to time.
2. The result of the Evaluation Test will be fully acceptable to me and I will not dispute it in any case.
3. I will not ask for any change of subject at any stage of the course. I will not object to any change in the period of the course.
4. I will not be involved in any sort of political, linguistic and sectarian activities neither I will organize OR
become member of any political student party / organization or any student grouping.

5. I will not dispute / challenge the Diploma/Degree issued by the Institute of DUHS, Karachi in the court of law and neither liaison with any Newspaper.

6. I will not object if the security deposit is fore-fit due to termination from the course on disciplinary grounds OR discontinuation due to personal reasons.

7. Damage to the installations/items can be recovered from the security deposit.

8. In case of expulsion / termination from courses on basis of gross misconduct / violence / terrorism I will not challenge the decision in any court of law in Pakistan.

9. I accept that continuous absence for more than 15 days without prior information may lead to termination from the course by the authorities concerned.

10. I will abide by all the rules and regulations of the course, student conduct and library etc as mentioned in the prospectus.

11. I undertake that if I am found involved in any unlawful activity or providing incorrect information at any stage, the institute shall have the right to cancel any admission without assigning any reason.

Signature of Father/Guardian

Signature of Student

N.I.C. No.

Date:

Student of

Witness

Session

N.I.C. No.
RULES FOR THE PAYMENT OF FEE:

1. Any fee deposited is non-refundable.
2. Payorder of two semester’s tuition fee (of the respective category) will have to be paid within one week after the start of 3rd, 5th, and 7th Semesters.
3. In case the fee is not submitted during the given specified time late payment charges will be charged as follows:
   - First month (after lapse of first week) ...........................................2.5 % of tuition fee
   - Second month .................................................................5.0 % of tuition fee
   - Third month .................................................................7.5 % of tuition fee
   - Fourth month .................................................................10.0 % of tuition fee
4. Fee of all categories will increase by 10% every year.

AFTER FOUR MONTHS THE SEAT IS LIABLE TO BE CANCELLED AND STUDENT WILL NOT BE ALLOWED TO APPEAR IN ANY EXAMINATION.

5. The revised tuition fee and late payment charges will be applicable to all the EXISTING STUDENTS presently studying in any college / institution of DUHS and also to the NEWLY ADMITTED STUDENTS.
6. Fee is subject to revision by the university at any time during the course of the study.

● At the time of Admission
  A) Admission fee ......20,000/- Rs.
  B) Tuition Fee..........52,000/- Rs. (Rs. 26,000 per semester)
  C) RF-ID Card Fee......1000/- Rs.
  D) Transport Fee ......9600/- Rs.
      Total......................82,600/- Rs. (at the time of admission)

● For Subsequent Years (two semesters)
  A) 52,000/- Rs. (Rs. 26,000 per semester)

● For repeaters, fee will be charged according to University rules and regulations
SCHEDULE FOR ADMISSIONS TO
ALLIED HEALTH SCIENCES
IMT & DCP
SESSION 2013
DOW UNIVERSITY OF HEALTH SCIENCES

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<th>S.No.</th>
<th>SCHEDULE</th>
<th>DATE</th>
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<tbody>
<tr>
<td>1</td>
<td>Date for inviting applications</td>
<td>1\textsuperscript{st} Oct. 2012</td>
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<tr>
<td>2</td>
<td>Last date for submitting applications</td>
<td>25\textsuperscript{th} Oct. 2012</td>
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<tr>
<td>3</td>
<td>Entry Test</td>
<td>11\textsuperscript{th} Nov. 2012</td>
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<tr>
<td>4</td>
<td>Display of the Initial Merit List</td>
<td>17\textsuperscript{th} Nov. 2012</td>
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<tr>
<td>5</td>
<td>Last date for Inviting objections to the Initial Merit List including re-calculation of marks</td>
<td>20\textsuperscript{th} Nov. 2012</td>
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<td>6</td>
<td>Interviews for verification of Original Documents and Submission of Pay Orders for Final Allocation of all categories on Merit Cum Choice Basis</td>
<td>1\textsuperscript{st} Dec. 2012</td>
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<td><strong>NOTE</strong></td>
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<td>Please keep visiting DUHS website daily for Final Announcement of Interview date</td>
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<td>7</td>
<td>Start of First Semester</td>
<td>14\textsuperscript{th} Jan. 2013</td>
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