PROSPECTUS

SESSION 2025-26

DOW INSTITUTE OF MEDICAL TECHNOLOGY (DIMT)

ADMISSION IN MEDICAL TECHNOLOGY(IMT)

Email: admissions@duhs.edu.pk Website: www.duhs.edu.pk

Prof. Dr. Nazli Hossain
Vice Chancellor
Dow University of health Sciences

Message by Vice Chancellor

I am glad to write this message. Dow University of Health Sciences was established in 2004, with the Vision to provide quality education in order to produce leaders in the delivery of healthcare, health education and healthcare delivery, by imparting knowledge through excellence in research and education. Its ultimate aim is to develop strategies to cater to cost effective and quality community health services.

Taking charge of a University is a unique opportunity. There is a great responsibility of assuring quality education and service delivery at all levels of the institution. This is only possible with the help of a dedicated team of directors, faculty members, and the supporting staff of the constituent departments and institutes. By the Grace of God, Dow University of Health Sciences has emerged as the fastest growing institution offering quality medical education in all of South Asia. It is the result of the dedicated team efforts that Dow University is ranked ahead of many regional medical institutions.

Dow University of Health Sciences has also made an impact national and international levels, especially through its graduates who have gone on to achieve progress and prosperity globally. The alumni of this University have proven to be successful, resourceful, and philanthropic individuals who have contributed their time, efforts and resources to make a significant impact on their society.

We aim to create an environment that fosters physical, emotional, and psychological wellness, and look to advance healthy lifestyles. By constantly measuring our deliverables, we have succeeded in creating an infrastructure of state-of-the-art equipment and technology that meets the need of the future, and provides superior healthcare delivery systems today.

I am optimistic that graduates of Allied Health Sciences program will bring honor to DUHS by strengthening the concept of knowledge-based economy in Pakistan through their innovations, scientific and entrepreneur skills.

Prof. Dr. Muhammad Sameer Qureshi
MBBS, Ph.D (UK)
Principal (DIMT)
DEAN
FACULTY OF ALLIED HEALTH SCIENCES

Message from the Principal *Dow Institute of Medical Technology*

With the blessings of Almighty Allah, Dow Institute of Medical Technology is dedicated to provide academic and technical education and produce highly skilled and motivated graduates since its inception in 2006.

The vision is to be a center of excellence to impart education, skilled based learning and research for allied health sciences. This Institute is offering BS medical Technology program of four years in five major disciplines namely; Clinical laboratory Sciences, Optometry and Visual Sciences, Cardiovascular Perfusion, Respiratoryand Critical care and surgical technology

Medical Technologists graduated from Dow Institute of medical Technology are educated and trained to impart their skills as a vital part of technical aspects in Allied Health care systems. The Alumni graduated from this Institute are serving by contributing to the development and application of latest technology to improve patient care not only at Nation al but also at International level. Lastly, I would emphasize that Dow Institute of Medical Technology is dedicated to produce Medical technologists, educated and trained to cope up with state-of-the-art advanced technology in Allied health Sciences with a promising scope in career.

VISION OF IMT

To become a Center of excellence in education through research and technical skills in the field of medical technology

MISSION OF DIMT

To provide updated and advanced knowledge to our graduates in the field of Medical technology through learning ,training and practical skills along with critical thinking in multidisciplinary program for the betterment of community.

OVERVIEW

The term 'Allied health Sciences' was popularized during the deliberations that led to the inception of the Allied Health Professions Personnel Training Act in 1967. The passage of this legislation brought about a new and radical concept of unifying all the various disciplines that comprise allied health into academic units with a single administration.'' (Association of Schools of Allied Professionals website www.duhs.edu.pk)

The definition may vary across countries and context, but generally it is considered distinct from Nursing, Medicine and Pharmacy. The Center for Health Profession, California reported that 60 percent of the total health work force comprises of Allied Health Professionals. In Pakistan Allied Health Professionals is also known as Medical Technology that 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.

DOW INSTITUTE OF MEDICAL TECHNOLOGY

Vision of the Chancellor to develop human resources in Allied Health disciplines transformed into reality in April 2005 with the inception of Dow Institute of Medical Technology (DIMT) in 2006 under the auspicious and dynamic guidance of Late Dr. Syed Sarwat Hassan. The Institute is one of its kinds where Bachelor of Science in four different technologies namely: Clinical Laboratory Sciences, Respiratory and Critical Care Technology, Surgical Technology and Clinical Ophthalmology Technology were started simultaneously. Later on programs for Occupational Therapy, Dental Hygiene and Dental Care Professional were introduced; which was followed by B.S program in Perfusion Sciences. The later three are being offered by their respective Institutes whereas, Cardiovascular Perfusion (later Perfusion Sciences) along with the previousfour is still being offered by DIMT.

ABOUT THE PROGRAM

The program focuses on the development of scholarly activities designed to develop and advance competencies in clinical skills, critical thinking, and evidence-based practices. 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. The medical technology program at DUHS offers 4-year Bachelor of Sciences degree. During the first two years the program comprises of courses in basic medical sciences, communication skills, general education and concerned technical sciences. This is followed by courses in advanced clinical sciences, clinical practices and technical skills. Throughout the program the students are placed in various clinical settings to not only apply the knowledge acquired but also to polish their technical skills. Research is also an integral part of the curriculum and courses in Research Methodology and Biostatics followed by undergraduate research projects is a prerequisite for the successful completion of the program. Upon successful completion of bachelor's program DUHS offers six months of paid internship in the approved affiliated clinical sites.

Programs are offered in five different technologies:

- Clinical Laboratory Sciences
- Respiratory & Critical Care Technology
- Surgical Technology
- Optometry and Visual Sciences
- Cardiovascular Perfusion

2.0. NUMBER OF SEATS:

Programs are offered in five different technologies:

1. Clinical Laboratory Sciences 25 Seats
2. Respiratory & Critical Care Technology 25 Seats
3. Surgical Technology 25 Seats
4. Optometry and Visual Sciences 50 Seats
5. Cardiovascular Perfusion 25 Seats

RECOGNITION BY THE ALLIED HEALTH PROFESSIONAL COUNCIL OF PAKISTAN

Dow Institute of Medical Technology is registered with the allied health regulatory council that is Allied Health Professional Council of Pakistan (AHPC). Our students are actively obtaining licenses for practice from AHPC.






Allied Health Professional Council visit at Dow Institute of Medical Technology

CURRICULUM

COMPULSORY / BASIC SUBJECTS

Serial No	Course Name	Codes
1.	PAKISTAN STUDIES	PAK-STD 202
2.	PSYCHOLOGY	PSY 102
3.	HISTORY/PHILOSOPHY	HIS 102/PHIL 102
4.	MATHEMATICS	MATH 212
5.	BIOCHEMISTRY	BCHEM 202
6.	PHARMACOLOGY	PHARM 202
7.	CIVICS AND COMMUNITY ENGAGEMENT	CIVCM 204
8.	ENGLISH FOUNDATION	ENG-F 211
9.	PHYSICS	PHYS 201
10.	CHEMISTRY	CHEM 201
11.	ISLAMIAT/ETHICS	ISL 201/ ETHIC 201
12.	COMPUTER SKILLS AND INTEGRATED ARTIFICIAL INTELLEGENCE	CSAI 201
13.	PHYSIOLOGY	PIO 201
14.	ANATOMY	ANAT 201
15.	MICROBIOLOGY AND INFECTION CONTROL	MICRO 203
16.	ENTREPRENEURIAL STRATEGY	ENTP 203
17.	BIOSTATICS	BSTAT 323
18.	EXPOSITORY WRITING	ENG-W 323

CURRICULUM

SURGICAL TECHNOLOGY

Serial No	Course Name	Course Code
1.	INTRODUCTION TO SURGICAL TECHNOLOGY	ST-INTRO 203
2.	OPERATING ROOM MANAGEMENT	ST-ORM 304
3.	SURGICAL INSTRUMENTS	ST-INS 305
4.	SURGICAL ANATOMY-I	ST-ANAT 314
5.	SURGICAL PHYSIOLOGY	ST-PIO 304
6.	SURGICAL TERMINOLOGY	ST-TERM 304
7.	SURGICAL TECHNOLOGY-CLINICAL PRACTICUM I	ST-CP 414
8.	APPLIED GENERAL SURGICAL PATHOPHYSIOLOGY-I	ST-PATH 315
9.	OPERATING ROOM PHYSICS	ST-PHYS 305
10.	PRE & POST-OPERATIVE MANAGEMENT	ST-PPMAN 305
11.	ASEPTIC TECHNIQUE AND INFECTION CONTROL	ST-ASTIC 306
12.	SURGICAL TECHNOLOGY-CLINICAL PRACTICUM II	ST- CP 425
13.	OR-PROCEDURE-I	ST-PROCD 316
14.	SURGICAL ANATOMY-II	ST-ANAT 326
15.	WOUND MANAGEMENT	ST-WONM306
16.	APPLIED GENERAL SURGICAL PATHOPHYSIOLOGY-II	ST- PATH 326
17.	SURGICAL TECHNOLOGY-CLINICAL PRACTICUM III	ST- CP 436
18.	OR-PROCEDURE-II	ST-PROCD 327
19.	SURGICAL PHARMACOLOGY AND ANESTHESIA	ST-PHARM 307
20.	CLINICAL DIAGNOSTICS IN SURGERY	ST-DIAG 307
21.	ARTIFICIAL INTELLIGENCE AND ROBOTICS IN SURGERY	ST-AIRS 207
22.	SURGICAL TECHNOLOGY-CLINICAL PRACTICUM IV	ST- CP 447
23.	OR PROCEDURES III	ST-PROCD 338
24.	STEREOTACTIC RADIOSURGERY	ST-SRS 208
25.	SURGICAL TECHNOLOGY-CLINICAL PRACTICUM V	ST- CP 458
26.	SURGICAL TECHNOLOGY-CLINICAL PRACTICUM VI	ST- CP 468

CURRICULUM

RESPIRATORY AND CRTICIAL CARE TECHNOLOGY

Serial No	Course Name	Course Code
1.	INTRODUCTION TO CRITICAL CARE-I	RCC-ICC 213
2.	RESPIRATORY AND CRITICAL CARE MEDICAL TERMINOLOGY	RCC-RCCMT 203
3.	RESPIRATORY AND CRITICAL CARE TECHNOLOGY – CLINICAL PRACTICUM I	RCC-CP 413
4.	INTRODUCTION TO CRITICAL CARE-II	RCC-ICC 324
5.	DIAGNOSTICS IN CRITICAL CARE-I	RCC-DCC 314
6.	PROCEDURES AND THERAPEUTIC INTERVENTION-I	RCC-PTI 314
7.	INVASIVE AND NON-INVASIVE MECHANICAL VENTILATION-I	RCC-INMV 314
8.	RESEARCH METHODS AND PRINCIPLES	RCC-RMP 304
9.	RESPIRATORY AND CRITICAL CARE TECHNOLOGY – CLINICAL PRACTICUM II	RCC-CP 424
10.	APPLIED CARDIOPULMONARY PATHOPHYSIOLOGY-I	RCC-ACPP 215
11.	DIAGNOSTICS IN CRITICAL CARE-II	RCC-DCC 425
12.	PROCEDURES AND THERAPEUTIC INTERVENTION-II	RCC-PTI 425
13.	INVASIVE AND NON-INVASIVE MECHANICAL VENTILATION-II	RCC-INMV 425
14.	CARDIOPULMONARY PHYSIOLOGY	RCC-CPP 205
15.	RESPIRATORY AND CRITICAL CARE TECHNOLOGY – CLINICAL PRACTICUM III	RCC-CP 435
16.	PHYSICAL PRINCIPLES AND TECHNIQUES IN RESPIRATORY AND CRITICAL CARE*	RCC-PPTRC 306
17.	ANAESTHESIA IN CRITICAL CARE*	RCC-ACC 206
18.	APPLIED CARDIOPULMONARY PATHOPHYSIOLOGY-II	RCC-ACPP 326
19.	RESPIRATORY AND CRITICAL CARE TECHNOLOGY – CLINICAL PRACTICUM IV	RCC-CP 546

20.	NEONATAL AND PEDIATRIC RESPIRATORY CARE	RCC-NPRC 307
21.	CARDIOPULMONARY REHABILITATION	RCC-CPR 307
22.	INTERNSHIP	RCC-INTE 507
23.	RESPIRATORY AND CRITICAL CARE TECHNOLOGY – CLINICAL PRACTICUM V	RCC-CP 547
24.	ADVANCED RESPIRATORY AND CRITICAL CARE	RCC-ARCC 408
25.	RESPIRATORY AND CRITICAL CARE TECHNOLOGY – CLINICAL PRACTICUM VI	RCC-CP 568
26.	HEALTH AND HOSPITAL MANAGEMENT*	RCC-HHM 308
27.	DRUG THERAPY IN CRITICAL CARE	RCC-DTCC 308
28.	CAPSTONE PROJECT	RCC-CP 508

CURRICULUM

OPTOMETRY AND VISUAL SCIENCES

Serial No	Course Name	Course Code
1.	PHYSICAL AND GEOMETRICAL OPTICS	OPVS-PGO 303
2.	FUNDAMENTAL INTRODUCTION OF OPTOMETRY AND VISION SCIENCES	OPVS-FOPVS 303
3.	OCULAR ANATOMY AND PHYSIOLOGY	OPVS-OAP 303
4.	BASIC CLINICAL REFRACTION	OPVS-BREF 304
5.	OPD AND OT PROCEDURE	OPVS-OATP 304
6.	OPHTHALMIC AND OPTICAL INSTRUMENTATION	OPVS-OAOI 304
7.	OCULAR DISEASE-I	OPVS-ODS 414
8.	OCULAR PHARMACOLOGY	OPVS-OPHAR 404
9.	GENERAL PATHOLOGY	OPVS-GPATH 404
10.	ADVANCE CLINICAL REFRACTION	OPVS-ACREF 405
11.	BASIC OCULAR INVESTIGATION	OPVS-BOIN 305
12.	BASIC CONTACT LENS	OPVS-BCLEN 305
13.	OCULAR DISEASE-II	OPVS-ODS 425
14.	DISPENSING OPTICS-I	OPVS- DISP 415
15.	ADVANCE CONTACT LENS	OPVS- ACLEN 406
16.	LOW VISION-I	OPVS-LOW 416
17.	DISPENSING-II	OPVS-DISP 426
18.	BASIC ORTHOPTICS	OPVS-BORTH 406
19.	RESEARCH METHODS AND PRINCIPLE	OPVS-RMP 406
20.	LOW VISION-II	OPVS-LOW 427
21.	ADVANCED ORTHOPTICS	OPVS-AORT 407
22.	ELECTIVE	OPVS-ELEC 407
23.	COMMUNITY OPHTHALMOLOGY	OPVS-COPH 407
24.	SPECIALIZED CLINIC	OPVS-SPC 408
25.	CLINICAL ORTHOPICS	OPVS-CORTHO 408
26.	OPTICAL SHOP AND INDUSTRY MANAGEMENT	OPVS-OSM 308

CURRICULUM
CARDIOVASCULAR PERFUSION

Serial No	Course Name	Course Code
1.	INTRODUCTION TO PERFUSION TECHNOLOGY	CVP-INTRO 203
2.	CARDIOVASCULAR ANATOMY	CVP-CVA 303
3.	CARDIOVASCULARPERFUSION- CLINICAL PRACTICUM I	CVP-CP 313
4.	RESEARCH METHODS AND PRINCIPLES	CVP-RMP 304
5.	CARDIOVASCULAR PHYSIOLOGY	CVP-CPIO 304
6.	PERFUSION MODULE	CVP-PM 404
7.	DIAGNOSTIC TECHNIQUES IN CARDIOVASCULAR PERFUSION	CVP-DIAG 304
8.	CARDIOVASCULAR PERFUSION- CLINICAL PRACTICUM II	CVP-CP 424
9.	PATHOLOGY	CVP-PATH 305
10.	PERFUSION HEMATOLOGY	CVP-HEM 305
11.	SPECIAL EQUIPMENT IN CARDIOVASCULAR PERFUSION	CVP-SEP 405
12.	PERFUSION PHARMACOLOGY	CVP-PHARM 305
13.	MONITORING OF CARDIOPULMONARY BYPASS	CVP-MCPB 405
14.	CARDIOVASCULAR PERFUSION - CLINICAL PRACTICUM III	CVP-CP 435
15.	OPERATION ROOM STANDARDS	CVP-ORS 206
16.	PATHOPHYSIOLOGY & SURGICAL REPAIR I	CVP-PSR 316
17.	BLOOD CONSERVATION IN PERFUSION	CVP-BCP 406
18.	CARDIOVASCULAR PERFUSION - CLINICAL PRACTICUM IV	CVP-CP 446
19.	ANESTHESIA MANAGEMENT IN CARDIOPULMONARY BYPASS	CVP-ANCPB 407
20.	PEDIATRIC CARDIOPULMONARY BYPASS	CVP-PCPB 407
21.	PATHOPHYSIOLOGY & SURGICAL REPAIR II	CVP-PSR 427
22.	NON CARDIAC SURGICAL APPLICATION	CVP-NCSA 407
23.	CARDIOVASCULAR PERFUSION - CLINICAL PRACTICUM V	CVP-CP 557

24.	INTERNSHIP	CVP-INTE 507
25.	HEALTH CARE MANAGEMENT	CVP-HCM 308
26.	EXTRACORPOREAL MEMBRANE OXYGENATION	CVP-ECMO 408
27.	CARDIOVASCULAR PERFUSION - CLINICAL PRACTICUM VI	CVP-CP 568
28.	CAPSTONE PROJECT	CVP-CP 508

CURRICULUM

CLINICAL LABORATORY SCIENCES

Serial No	Course Name	Course Code
1.	INTRODUCTION TO CLINICAL LABORATORY SCIENCES	CLS-INTRO 203
2.	QUALITY ASSURANCE AND CONTROL	CLS-QAC 303
3.	CLINICAL LABORATORY SCIENCES-CLINICAL PRACTICUM I	CLS-CP 313
4.	RESEARCH METHODS AND PRINCIPLES	CLS-RMP 304
5.	HISTOPATHOLOGY I	CLS-HISTO 314
6.	CLINICAL CHEMISTRY I	CLS-CCHEM 314
7.	LABORATORY MATHEMATICS	CLS-LMATH 304
8.	DIAGNOSTIC MICROBIOLOGY I	CLS-DM 314
9.	CLINICAL LABORATORY SCIENCES-CLINICAL PRACTICUM II	CLS-CP 424
10.	IMMUNOLOGY AND SEROLOGY	CLS-IMS 305
11.	HEMATOLOGY I	CLS-HEM 315
12.	MOLECULAR BIOLOGY AND TECHNIQUES I	CLS-MBT 315
13.	CLINICAL LABORATORY SCIENCES-CLINICAL PRACTICUM III	CLS-CP 435
14.	TRANSFUSION MEDICINE	CLS-TM 306
15.	BODY FLUID ANALYSIS	CLS-BFA 406
16.	CLINICAL LABORATORY SCIENCES-CLINICAL PRACTICUM IV	CLS-CP 546
17.	LABORATORY MANAGEMENT	CLS-LM 207
18.	BIOINFORMATICS	CLS-BINF 207
19.	CLINICAL LABORATORY SCIENCES-CLINICAL PRACTICUM V	CLS-CP 557
20.	INTERNSHIP	CLS-INTE 507
21.	CAPSTONE PROJECT	CLS-CP 508
22.	CLINICAL LABORATORY SCIENCES-CLINICAL PRACTICUM VI	CLS-CP 568

23.	DIAGNOSTIC MICROBIOLOGY II	CLS-DM 525
24.	CLINICAL CHEMISTRY II	CLS-CCHEM 525
25.	HEMATOLOGY II	CLS-HEM 526
26.	MOLECULAR BIOLOGY AND TECHNIQUES II	CLS-MBT 526
27.	ADVANCED DIAGNOSTIC TECHNIQUES	CLS-ADT 607
28.	HISTOPATHOLOGY II	CLS-HISTO 528
29.	CLINICAL ROTATION I	CLS-CR 517
30.	CLINICAL ROTATION II	CLS-CR 628

GRADE/GPA REQUIREMENT FOR EACH SEMESTER & GRADUATION

All courses are continuously assessed during the semester through quiz, assignment, Oral Presentation, Midterm Examination, Post Viva Rotation and Final Examination. Grading is absolute, not relative grading. Percentages are converted in GPA and their respective grades as follows;

GRADE	PERCENTAGE	GPA
A+	80% to 100 %	4.0
A	75%to 79 %	4.0
A-	70%to 74 %	3.7
B+	67%to 69 %	3.3
B	60%to 66 %	3.0
C+	56%to 59 %	2.9
C	50%to 55 %	2.0
F	(< 50 %) Fail ..below	2.00

Fractional Grade Point Average will be calculated according to approved rules

ASSESSMENT METHODS

EXAMS EVALUATION	
Terminal Examination – BCQ's	70%
Mid Term Examination – BCQ/MCQ	15%
INTERNAL EVALUATION (*VivaVoice, Presentation, Assignment,Quizzes, Workshops, Attendance)*	15%
CLINICAL PRACTICUM / ROTATIONS	
EXAMS EVALUATION *(conducted by HODs of respective departments) VIVA/ SHORT QUESTIONS*	50%
INTERNAL EVALUATION *(Structured VIVA by internal faculty of DIMT)*	50%

FACILITIES

SKILL'S LAB

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 equipment under supervision of experienced medical technologist.

Before clinical training at affiliated hospitals every student receives extensive hands on training in relevant skills in the skill's lab under supervision of faculty. Respiratory & Critical care technology students are trained at Professional DC skills lab.

COMPUTER LAB

The Computer lab with 45 latest systems is fully operational. The computer lab offers following facilities.

i. *Computer Courses: Interactive lectures on basic computer skills such as MS- Word, Excel, PowerPoint, MS- Outlook express.*

ii. *Internet Facility: We give our students better chance to browse Medical Information, Current Updates, Research Articles or Concerned Topics.*

iii. *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.*

iv. *Multimedia: Presentations and lectures are delivered through latest audiovisual aid.*

v. *Internet Training: Internet training is being given to the students in terms of sharing documents, protecting them online, difference between Intranet and Internet etc.*

EXTRA-CURRICULAR ACTIVITIES

Annual Sports Week, Poster Competition, DUHS Independence Day Celebration, Workshops,Conferences,DUHS-DICE Exhibition, Community Services, Green Drive and plantation.

DEPARTMENTAL HIGHLIGHTS








Australia-Pakistan Workshop “Exploring Precision Medicine" A groundbreaking academic session on Exploring Precision Medicine was conducted on February 20, 2025, by the Dow Institute of Medical Technology (DIMT) in collaboration with the University of Technology Sydney (UTS) and Dow University of Health Sciences.



Entrepreneurial Strategy Course – Second Year (Odd Semester)
The selling activity under the course Entrepreneurial Strategy was successfully conducted at the Gymnasium, DUHS, on 29th June 2025. The theme of the event was “Food Fun Festival.”






Dow Institute of Medical Technology organized **International Allied Health Sciences Research Conference** in February 2025, inviting all Karachi-based institutes like Liaquat National Hospital, JSMU, Tabba Heart Institute, and Ziauddin University, among others involved in medical technology. The event featured 29 pre-conference workshops and spanned from February 10 to February 20, 2025, bringing together experts and professionals in the field to share knowledge and advancements in medical technology



Dow Institute of Medical Technology On February 12, the International Allied Health Sciences Research Conference at Dow Institute of Medical Technology (DIMT) hosted Day 3 of Pre-Conference Workshops, featuring a session on “Unleashing Mind Mysteries by Quantitative Electroencephalography (QEEG).”

Dow Institute of Medical Technology, Surgical Technology faculty organized International Workshop EMPOWER CHILDBIRTH Pakistan's pioneering maternal health initiative!
This groundbreaking series—featuring respectful maternity care training, professional doula certification, and life-saving hemorrhage management skills—empowers healthcare

Youth Engagement through Co-Curricular Activities
The Dow Institute of Medical Technology (DIMT) successfully organized its Youth Engagement Program on Saturday, September 20, 2025 Themed "Islam as a Religion of Peace," lecture delivered by Mufti Muhammad Anas (Manager – Shariah Compliance, Certified Shariah Auditor & Advisor).

Perfusion Week, by Cardiovascular Perfusion, DIMT

Respiratory Week, by Respiratory and Critical Care Technology,DIMT





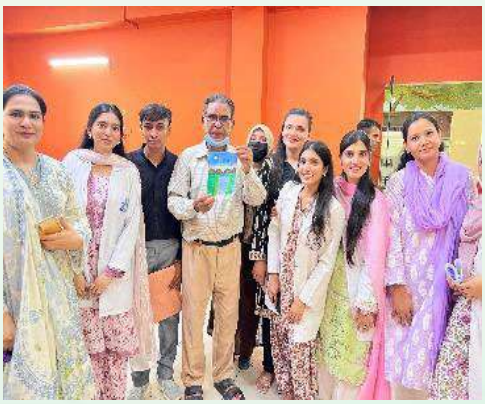

As a part of the Cardiopulmonary Rehabilitation course and commitment to community engagement, students from Dow Institute of Medical Technology (DIMT) visited Dar ul Sukun orphanage to conduct an awareness session on choking management, basic CPR, first aid, and hand hygiene. Organized by faculty of Respiratory and Critical Care Technology.






Community awareness session .The event, conducted as part of **Respiratory Week**, was organized by the Second-Year Students of Respiratory and Critical Care Therapy from Dow Institute of Medical Technology. It aimed to promote respiratory health awareness at **Education Trust Nasra School, Korangi Campus**, targeting students from class 9th and 10th.

Visit of final year DIMT students (Clinical Laboratory Science) to Sindh Institute of Animal Health (SIAH), Karachi, on 30th April, 2025



As a part of the Cardiopulmonary Rehabilitation course and commitment to community engagement, students from Dow Institute of Medical Technology (DIMT) visited Dar ul Sukun orphanage to conduct an awareness session on choking management, basic CPR, first aid, and hand hygiene. Organized by faculty of Respiratory and Critical Care Technology.

Abdur Rehman 1st year student DIMT, DUHS in Ashara Rehmatullil Alameen DIMT Won First prize in all DUHS. Topic :**Youth in the Light of Seerat Un Nabwi S.A.W.W..**MashaAllah

Aliyaan Ahmed stood 2nd in Asharah e Rehmatullil alameen from DIMT among all DUHS institutes.

On 14th August celebrations 2025 skit performance DIMT student Munawara won best skit prize.

DIMT student Jenny won 2nd Prize in Song Competition on Independence Day celebrations.

One of IMT's student Soha Khan participated in All Pakistan Declamation contest by PAF Academy Risalpur


Dow Institute of Medical Technology (DIMT) — along with other institutes of Dow University of Health Sciences (DUHS) — proudly stands united with our brave armed forces in the face of aggression.
During the May protests, our unwavering spirit of solidarity, strength, and patriotism shone brightly through the participation of faculty, students, and staff alike.




DIMT and other DUHS students with faculty Celebrating "**Youm-e-Tashakur**" and Independence day to collectively thank the Almighty for his countless blessings and to pay heartfelt tribute to the guardians of our nation after the victory of "**Operation Bunyan ul Marsoos**"

A **Solidarity Rally** in support of the Pakistan Armed Forces was scheduled on Thursday, 15th May 2025. The Rally started from Nishan-e-Pakistan and conclude at Clock Tower. DIMT participated with students, faculty, and staff.

Ms. Quratulain Amir – Lecturer, Institute of Medical Technology (DUHS) got grant for research.

DIMT faculty Ms.Surraya Shams with students presenting her research project in DUHS-DICE 2025

Comprehensive Eye Health Screening for School Children and **World Sight Day** by Optometry and Visual Science Department DIMT

Surgical technologist week 2025:" REVOLUTION OF SURGICAL TECHNOLOGIST IN TECHNOLOGY ERA" Project Exhibition

The Green Youth Movement (GYM) CLUB Plantation Activity by DIMT students

The Green Youth Movement (GYM) CLUB Beach cleaning activity by DIMT and other DUHS students

INTRA–DUHS INDOOR GAMES 2025,DIMT students won prize.

DIMT International Students at Governor house Karachi, with Honorable Chancellor DUHS for **IFTAR DINNER.**

DIMT M.Phil. Medical Technology Students presented their research projects in DUHS-DICE 2025

OREINTATION DAY 2025 DOW INSTITUTE OF MEDICAL TECHNOLOGY (DIMT)

INFRASTRUCTURE AND FACILITIES OF DOW INSTITUTE OF MEDICAL TECHNOLOGY

Surgical technology, Respiratory and critical care laboratories, DIMT

Quantitative Electroencephalography (QEEG) facility,DIMT

Conference room

Clinical Laboratory Science Technology Labs, DIMT

Spacious and air – conditioned lecture halls for students, DIMT

Girl's common room

Gymnasium DUHS Ojha Campus

Digital Library DUHS Ojha Campus

DOW INSTITUTE OF MEDICAL TECHNOLOGY FACULTY (DIMT)		
S.No.	**NAME**	**DESIGNATIONS**
1.	PROF. DR. MUHAMMAD SAMEER QURESHI	Principal & Dean (Faculty of Allied Health Sciences)
2.	DR. MEHA FATIMA AFTAB	Associate Professor & M.Phil. Program Director
3.	DR. NIDA BAIG	Assistant Professor & Section Head (Clinical Laboratory Sciences)
4.	MS. SALMA PARVEEN	Lecturer & Section Head (Surgical Technology)
5.	MS. RUQUIA NOOR	Sr. Medical Technologist & Section Head (Respiratory and Critical Care Technology)
6.	MS. KIRAN NOORUDDIN	Lecturer & Section Head (Cardiovascular Perfusion)
7.	MS. IZMAL UROOJ	Assistant Professor & Section Head (Optometry and Visual Sciences)
8.	DR. ANOSH TAHIR	Instructor & Section Head (Basic Sciences)
9.	DR. ASIF IQBAL KHAN	Assistant Professor
10.	DR. ANEELA MEHBOOB	Assistant Professor
11.	MS. SYEDA HINA RIZVI	Senior Lecturer
12.	MR. AMMAR YASIR JUNEJO	Senior Lecturer
13.	MS. SABAHAT AZIZ	Senior Lecturer
14.	MR. MUHAMMAD ASIF	Senior Lecturer
15.	MR. MUHAMMAD YASIR MALIK	Lecturer
16.	MS. AFSHAN ARZOO	Lecturer
17.	MS. QURATULAIN AMIR	Lecturer
18.	MS. SIDRA ZAHEER	Lecturer
19.	MR. MUHAMMAD FAROOQ-UR-REHMAN	Lecturer

20.	MS. AMBREEN RAFIQUE	Lecturer
21.	DR. DANIYA NOREEN	Lecturer
22.	MS. RIMSHA GELLANI	Lecturer
23.	MS. SHAGUFTA YASIR	Lecturer
24.	MS. UME FARWA NAZAR	Lecturer
25.	MS. ANAM JAMALI	Lecturer
26.	MS. SURRAYA SHAMS	Instructor
27.	MS. TEHREEM YASEEN SHAREEF	Instructor
28.	MS. AMBREEN IQBAL AHMED	Sr. Medical Technologist
29.	MS. SAMINA BAIG	Sr. Medical Technologist
30.	MR. MUHAMMAD NIZAMUDDIN	Sr. Medical Technologist
31.	MS. KAMILA MARIUM IFTIKHAR	Medical Technologist
32.	MS. SANA AHMED	Medical Technologist
33.	MR. ZEB HUSSAIN	Medical Technologist
34.	MR. MUHAMMAD ASIF	Microbiologist

DOW INSTITUTE OF MEDICAL TECHNOLOGY ADMINSTRATION (DIMT)

S.No.	NAMES
1.	MIRZA USMAN SHAH
2.	MUHAMMAD WAQAS ALI
3.	MUHAMMAD KHALIL ULLAH
4.	SYED AZHAR ALI
5.	SYED HASSAN BILAL
6.	MUHAMMAD FAKHRUDDIN
7.	EJAZ AHMED
8.	SYED MUHAMMAD WAHAJ
9.	TAJAMMUL HUSSAIN
10.	MUHAMMAD MUBEEN
11.	AMIR KHAN
12.	SHAHZAD

FUTURE PROSPECTS

CLINICAL LABORATORY SCIENCES

Clinical laboratory technologists seek their career opportunities in clinical laboratories at hospitals; doctor's /physician's offices, reference and private laboratories Clinical Laboratory Technologists are an integral part of Clinical and Research laboratories.

SURGICAL TECHNOLOGY

A Surgical Technologist is expected to always anticipate the needs of the supervising surgeon and to provide quality patient care with a special focus on safety and efficiency. With advancing experience they can specialize in progressively more demanding, and more difficult medical specialties e.g. neurosurgery, orthopedic and cardiac surgery and furthermore; they can specialize to become surgical first assistant or circulating surgical technologists. According to the Bureau of Labor Statistics, the circulator helps interview the patient before and after surgery and may also assist with anesthesia. Professional scope includes: Outpatient clinics (for physicians and dentists), Ambulatory surgical centers (places that perform same/day care surgeries), Special mobile surgical teams and Private physician practices, surgical marketing units, research and development industries.Employment opportunities for surgical technologists can include: Hospitals, private clinics, R&D Institutions, Surgical Marketing Units, Post graduate Institutions, Managerial roles.

RESPIRATORY AND CRITICAL CARE TECHNOLOGY

Although Respiratory and Critical Care Technologists practice under the supervision of a physician, they are required to exercise considerable independent judgment in providing respiratory therapy to patients. They can advance the practice of respiratory therapy b y doing research and creating clinical practice guidelines.

About 75% of respiratory therapists are employed in acute care Units in hospitals (ICU, ER, OR, Neonatal nurseries and general wards) and some of them find employment in diagnostic laboratories, sleep disorder centers, rehabilitation, long-term acute care and skilled nursing facilities, patients' homes, patient transport systems, physician offices, convalescent and retirement centers, educational institutions and wellness centers. They can fill managerial and administrative positions and work in different types of jobs in private industries such as sales,

service and clinical support.

OPTOMETRISTS

Optometrists can pursue their careers in a variety of supervised clinical settings such as private offices of Ophthalmologists, group practices, hospital specialty clinics and university clinics. Since, they are highly-skilled technical personnel in the field; many can assume supervisory roles and teach other members of the allied health team. With additional training, an Optometrist may become an orthoptist specializing in the evaluation of patients with Squints and related muscle imbalances of the eye. Some individuals continue their education to become, ophthalmologists, or other high paying career

PERFUSIONISTS

Perfusionists usually work in hospitals affiliated with large medical centers and as a chief perfusionist generally directs a perfusion team. Additional scope of practice includes blood conservation, long term support for respiratory failure, and isolated limb perfusion for the treatment of malignant tumors.

Allied health professionals are usually at the forefront of research and innovations so that patients are continually receiving the very best healthcare. For example, in clinical perfusion sciences, staff could be investigating how less invasive surgical procedures of the heart impact on their work, or analyzing how their practices should differ when open heart surgery is performed on children rather than adult patients. Therefore, they may also work in educational institutions as teachers or researchers.

RESEARCH AND DEVELOPMENT AT DOW INSTITUTE OF MEDICAL TECHNOLOGY

Dow Institute of Medical Technology holds the honor to publish scientific work nationally and internationally. Here are some most recent scientific publications (2021-2024) from the faculty of Dow Institute of Medical Technology:

1. Ahmed S, Aftab MF, Ahmed N, Yusuf IM, Qureshi MS. Restoration of C-type natriuretic peptide and glial fibrillary acidic protein expression in fear centers and intrinsic cardiac ganglia by theta frequency sound during chronic stress in mice. Journal of Neurorestoratology. 2024/06/12/2024:100133. doi:https://doi.org/10.1016/j.jnrt.2024.100133

2. Faisal, A., Waqar, M., Fatima, T., Aftab, M. F., & Khan, M. A. (2024). Effect of three months high-intensity anaerobic treadmill-based exercise on intuitive decision-making capability: A prospective cohort study. Journal of Human Sport and Exercise, 19(3), 815-826. https://doi.org/10.55860/6fm4sk70

3. Majeed U, Aftab MF, Baloch DM, Ahmed S, Yusuf IM, Hasan MA, Qureshi MS. Modulation of Heart and Brain Function by Surah Al-Rehman Recitation Among Distressed Diabetic Patients in Pakistan. J Relig Health. 2022 Oct;61(5):3852-3865. doi: 10.1007/s10943-021-01431-2. Epub 2021 Sep 23. PMID: 34554380.

4. Muhammad, Nizamuddin & Hussain, Mehwish & Adnan, Syed. (2021). Screen time and Sleep Quality among College and University Students of Karachi. Journal of Health & Biological Sciences. 9. 1. 10.12662/2317-3076jhbs.v9i1.3214.p1-14.2021.

5. Noor R, Shahid F, Hydrie MZ, Imran M, Shah SH. Factors influencing birth preparedness and complication readiness among childbearing age women in Thatta district, Sindh. PloS one. 2022 Sep 29;17(9):e0275243.

6. Talat Roome, Maha Qasim, Sabahat Aziz, Ahsana Dar Farooq, Anam Razzak, Syed Farooq Ali, . Assessment of acute, sub-acute, chronic and genotoxicity of polyherbal formulation DCD-684 in mice. Pak. J. Pharm. Sci., Vol.34, No.4 (Suppl), July 2021, pp.1485-1498

7. Talat Roome, Maha Qasim, Ahsana Dar Farooq, Qibtiya Ilyas, Sabahat Aziz, Syed Farooq Ali. Antispasmodic activity and mechanism of action of polyherbal formulation DCD-684 on rabbit jejunum Pak. J. Pharm. Sci., Vol. 34, No.2 (Suppl), March 2021, pp.711-722

8. Hanif F, Washdev W, Bilwani F, Simjee SU, Haque Z. A Novel Variant in Dopamine Receptor Type 2 Gene is Associated with Schizophrenia. Archives of Medical Research. 2021 Apr 1;52(3):348-53.

9. Javed L, Hanif F, Malhi SM, Zaman U, Jahan N, Amir Q, Javed A, Malik AB, Abrar H. Diclofenac sodium enhances the antiepileptic effect of levetiracetam in pilocarpine induced epileptic mice model. Pakistan Journal of Pharmaceutical Sciences. 2021 Sep 2;34.

10.Arzoo, A., & Ali, S. (2022). Prevalence of stress, anxiety, depression, and job dissatisfaction in health care professional dealing with covid-19 patients. Annals of Psychophysiology, 9(1), 28-38. https://doi.org/10.29052/2412-3188.v9.i1.2022.28-38

11.Rehman, A. U., Farooqui, N. A., Siddiqui, N. Z, Alam,G., Gul,A., Ahmed,B., Asim.M., Khan,A.I.,et al Morchella esculenta mushroom polysaccharide (MEP) attenuates diabetes, modulate intestinal permeability and gut microbiota in type 2 diabetic mice model. Frontier in Nutrition 2022 Sep.

12.Rehman, A. U, Khan, A. I., Xin, Y., & Wang, L. Lactobacillus acidophilus CGMCC 878 impacts colorectal cancer in Sprague-Dawley rats through changing the gut microbiota. Medicine in Microecology. 2022 Sep 20:100062

13.Siddiqui NZ, Rehman AU, Yousuf W, Khan AI, Farooqui NA, Zang S, Xin Y, Wang L. Effect of crude polysaccharide from seaweed, Dictyopteris divaricata (CDDP) on gut microbiota restoration and anti-diabetic activity in streptozotocin (STZ)-induced T1DM mice. Gut Pathog. 2022 Sep 17;14(1):39.

14.Rehman, A.U., Khan, A.I., Xin, Y. et al. Morchella esculenta polysaccharide attenuate obesity, inflammation and modulate gut microbiota. AMB Expr 12, 114 (2022).

15.Khan, A. I., Rehman, A. U., Farooqui, N. A., Siddiqui, N. Z., Ayub, Q., Ramzan, M. N., Zexu, W., Zhang, X., Yu, Y., Xin, Y., & Wang, L. (2022). Shrimp peptide hydrolysate modulates the immune response in cyclophosphamide immunosuppressed mice model. Journal of Food Biochemistry, 00, e14251.

16.Khan AI, Rehman AU, Farooqui NA, Siddiqui NZ, Ayub Q, Ramzan MN, Wang L, Xin Y. Effects of Shrimp Peptide Hydrolysate on Intestinal Microbiota Restoration and Immune Modulation in Cyclophosphamide-Treated Mice. Molecules. 2022 Mar 6;27(5):1720.

17.Rehman AU, Khan AI, Zhiying T, Zhang X, Yuqi W, Bilal H, Abdallah Alsholi DM, Xin Y, Wang L. Morchella esculenta Polysaccharide Attenuates Obesity through Ameliorating Adipose and Liver Tissue Inflammation in Obese Mouse Model. J Biomed Res Environ Sci. 2022 May 05; 3(5): 488-500

18. Khokhar, A. M.., Khan, S.., Zahid, M., Lail, A., Khan, B. A., Khan, A. I., Baig, S., Hanif, S. N., Khan, H., Ullah, A., & Khan, A. (2021). Analysis of the HBV small S gene partial sequences and its implications for detection, prevention and treatment in Pakistani patients. Molecular Medicine Communications, 1(1), 69–81.

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