DOW INSTITUTE OF MEDICAL TECHNOLOGY (DIMT)

DOW UNIVERSITY OF HEALTH SCIENCES

STRATEGIC PLAN

(2024 - 2027)

Pioneering Excellence | Inspiring Innovation

To Heal | To Educate | To Discover


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PRINCIPAL'S MESSAGE

We are deeply committed to developing and delivering exceptional education and training for our stu-dents while providing outstanding clinical care to patients. As a constituent institute of Dow University of Health Sciences (DUHS), our mission aligns with the University's overarching goal of excellence in education, research, clinical care, and community service. Since its inception in 2006, DIMT has contin-uously evolved under the visionary guidance of pioneers like Late Dr. Syed Sarwat Hassan. Today, we offer various programs in Allied Health Sciences, including Clinical Laboratory Sciences, Respiratory and Critical Care Technology, Surgical Technology, and Clinical Ophthalmology Technology. In re-sponse to the growing healthcare demands, we have expanded our offerings to include Occupational Therapy, Dental Hygiene, Dental Care Professional programs, and Perfusion Sciences.

Our Institute stands at the forefront of Allied Health Sciences education in Pakistan. This field consti-tutes 60% of the global health workforce and plays a pivotal role in the healthcare system. Through a student-centered approach, we equip future Allied Health Professionals with the knowledge, skills, and ethical foundation to excel in their careers and make significant contributions to patient care. To uphold our mission, DIMT is recognized by the Higher Education Commission of Pakistan, and efforts are un-derway to achieve accreditation by the Allied Health Professional Council. These recognitions are a tes-tament to our dedication to maintaining rigorous academic and clinical standards that meet national and international benchmarks.

At DIMT, we also place great emphasis on fostering a culture of innovation and research. By engaging in impactful scholarships, we aim to enrich the learning experiences of our students, attract top-tier fac-ulty, and contribute to advancements in healthcare. Our research initiatives are carefully curated to ad-dress local and global healthcare challenges, aligning with the University's strategic plan to integrate cutting-edge technologies and interdisciplinary approaches.

As we move forward, DIMT remains committed to leveraging state-of-the-art facilities, innovative ped-agogy, and community engagement to produce graduates who are not only skilled but also compassion-ate professionals. With a focus on accountability and transparency, we strive to ensure that every deci-sion we make is informed by our mission to achieve excellence. I invite our students, faculty, and stakeholders to join us on this transformative journey. Together, let us uphold the values of Dow Uni-versity of Health Sciences and build a future defined by innovation, service, and excellence in Allied Health Sciences.

INTRODUCTION & 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 contexts, but generally, it is consid-ered distinct from Nursing, Medicine, and Pharmacy.

The Center for Health Professions, California, reported that 60 percent of the total health workforce comprises Allied Health Professionals. In Pakistan, Allied Health Professionals is also known as Medi-cal Technology, which 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 the technical aspects of the same.

INSTITUTE OF MEDICAL TECHNOLOGY

The Vision of the Chancellor to develop human resources in Allied Health disciplines transformed into reality in April 2005 with the inception of the Dow Institute of Medical Technology (DIMT) in 2006 under the auspicious and dynamic guidance of the Late Dr. Syed Sarwat Hassan. The Institute is one of its kind, where Bachelor of Science in four different technologies, namely Clinical Laboratory Sciences, Respiratory and Critical Care Technology, Surgical Technology, and Clinical Ophthalmology Technolo-gy, were started simultaneously.

Later, programs for Occupational Therapy, Dental Hygiene, and Dental Care Professionals were intro-duced, which was followed by a B.S. program in Perfusion Sciences. The latter three are being offered by their respective Institutes, whereas Perfusion Sciences, along with the previous four, is still being of-fered by the Institute of Medical Technology.

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 the development of a collaborative Perspective toward education and proper management and persistent goal-oriented efforts, are also integral parts of the program. The med-ical technology program at DUHS offers a 4-year Bachelor of Sciences degree. During the first two years, the program comprised courses in Basic medical sciences, communication skills, general educa-tion, and 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 undergradu-ate research projects, are a prerequisite for the successful completion of the program. Upon successful completion of the bachelor's program, DUHS offers six months of Paid internship in the approved affil-iated clinical sites.

Programs are offered in five different technologies:

1. **Clinical Laboratory Sciences**
   Section Head – Dr. Nida Baig
2. **Respiratory & Critical Care Technology**
   Section Head – Ms. Ruquia Feroz
3. **Surgical Technology**
   Section Head – Mr. Muhammad Nizamuddin
4. **Clinical Ophthalmology Technology**
   Section Head – Mr. Yasir Malik
5. **Perfusion Sciences**
   Section Head - Ms. Kiran Nooruddin

DOW INSTITUTE OF MEDICAL TECHNOLOGY ACCREDITATION

Developing and delivering quality education and training to the students and outstanding clinical care to the patients is at the heart of this University's mission. In this regard, the University has and will continue to seek accreditation/recognition of its colleges, schools and institutes, undergraduate and postgraduate programs, and clinical entities from relevant national and international bodies. DIMT currently has the following accreditation/recognition of its programs from the relevant agency of Paki-stan, which is the Higher Education Commission. Further, it will be accredited by the Allied Health Professional Council.

As a premier public institution, the University is keen to get engaged in selected areas of research and scholarship that continue to enrich our education, inform our clinical care, and are of value to the community. We believe that the acquisition of new knowledge will enrich the educational experience of our students, allow us to recruit and retain quality faculty, and continue to improve the quality of care that we provide for our patients.

SECTION I: OVERVIEW OF THE STRATEGIC

PLANNING PROCESS

Given the fact that DUHS is the largest and most comprehensive health sciences institution in Pakistan, we share an unprecedented responsibility and enormous potential to continue to shape the future of health care in this region. Accordingly, Professor Muhammad Saeed Qureshi, Vice Chancellor, DUHS, mandated that all key stakeholders in the University and the community be involved in the development of this Master Strategic Plan. The Executive Stra-tegic Planning Workgroup (see below) was therefore constituted with this mandate in sight, and the process of development of this Plan was informed and influenced not only by their active participation but also the valuable feedback that was actively sought from the faculty, staff, students, and members of this community.

The following guiding principles were used in the development of this Master Strategic Plan, and it is anticipated that this will be incorporated within the planning process that will be sub-sequently employed by various academic and administrative units in the development of their complementary strategic plans. It was envisioned that the Plan should:

- Be consistent with and contribute to the achievement of DUHS's vision, mission, and core values
- Be developed in a participative and collaborative manner and shared with all key stakeholders
- Reflect high but achievable and realistic aspirations, as well as demonstrate creativity and innovation in setting forth goals and strategic thrusts for the University.
- Be based on measurable goals and strategies and include appropriate perfor-mance metrics.
- Take into consideration available resources.
- Include a component on objective monitoring/evaluation.

A key component of the planning process was its genesis and review by a knowledgeable and appropriately constituted Executive Strategic Planning Workgroup. This review process ensured that all plans were conceptually and structurally sound, demonstrated high aspirations, creativi-ty, and innovative thinking, and contributed to the accomplishment of overall University goals. Recognizing both the time constraints of the planning schedule and the diversity of issues faced by a rapidly expanding University, the overall intent of this process was to keep it as simple as possible and provide appropriate flexibility in achieving the stated goals.

Members of the SPH Strategic Planning Workgroup:

Dr. Sameer Qureshi Chairperson, Professor. Principal DIMT

Ms. Kiran Nooruddin Lecturer, Academic and Administrative Coordination

Ms. Ruquia Noor Lecturer, Manage the operational aspects.

Ms. Salma Parveen Lecturer, Student services, development of facilities

Dr. Asif Iqbal Khan Assistant Professor, Focusing on research and innovation.

SECTION II: VISION, MISSION,
AND VALUES

One of the principal objectives of the strategic planning process was the articulation and communication of the fundamental purpose of the University. It is the construct within which challenges and opportunities are examined and analyzed, strategic issues framed, and strategic goals and thrusts articulated. It is also the process through which the plan is implemented and the lens that ultimately evaluates its effectiveness. The primary components of the University's purpose are its vision, mission, and values.

VISION

To be a pre-eminent academic institution committed to changing and saving lives

MISSION

Providing outstanding patient-centered education, training and clinical care informed by cutting-edge research and innovation generating and disseminating new knowledge

VALUES

CUSTOMER SERVICE
- Put patients & students first

EMPATHY & COMPASSION
- Understand before you judge
- Be concerned for sufferings & misfortunes of others

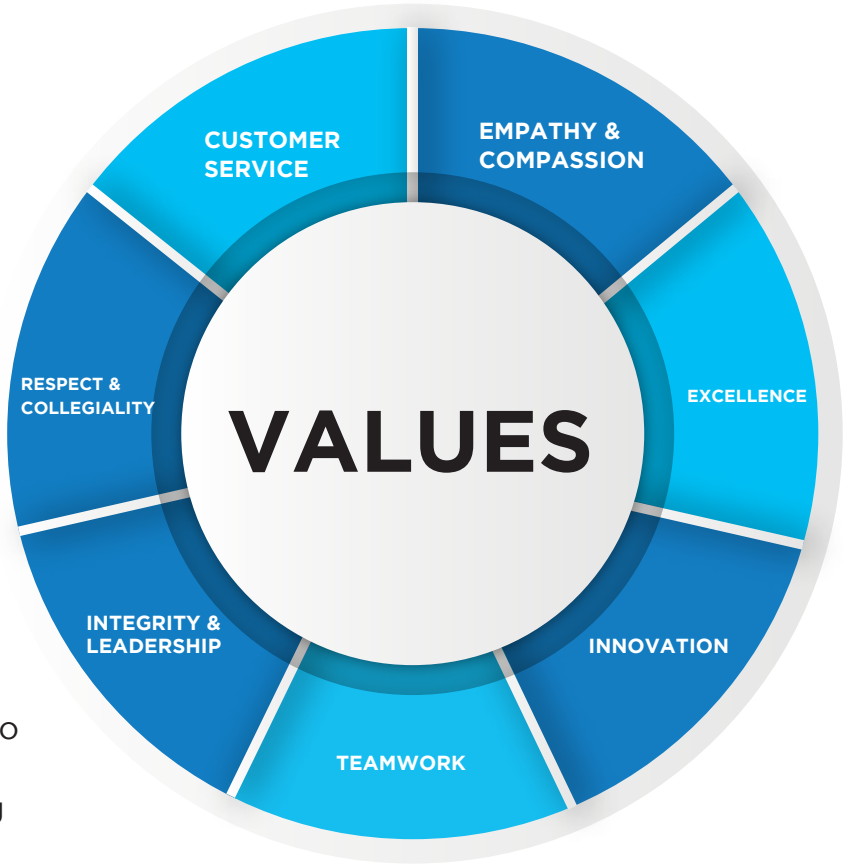
EXCELLENCE
- Be the best and commit to exceptional quality and service

INNOVATION
- Encourage curiosity, imagine, create and share

TEAMWORK
- Engage & collaborate

INTEGRITY & LEADERSHIP
- Be a role model and influence others to achieve their best
- Have the courage to do the right thing
- Hold yourself and others accountable

RESPECT & COLLEGIALITY
- Be kind
- Listen to understand
- Value different opinions



STATEMENT OF PURPOSE:

To become a center of excellence in education through research and technical skills in the field of med-ical technology

SECTION III: ASPIRATIONAL INSTITUTIONS

We believe that aspirational institutes not only allow benchmarking but also stand as beacons of excel-lence, embodying the pinnacle of educational aspiration and achievement. These institutions serve as catalysts for personal and professional growth as well. The Institute of Medical Technology, through a very careful process of identifying the following aspirational peers who share our vision, mission, and core values, listed the aspirational institutes of each program separately.

1. CLINICAL LABORATORY SCIENCES:

Following Aspirational Institute shares the vision and mission of Dow University of Health Sciences

- The University of Lahore, Lahore and Islamabad Campus
- University of Malaya, Malaysia

2. RESPIRATORY AND CRITICAL CARE TECHNOLOGY

Following Aspirational Institute shares the vision and mission of Dow University of Health Sciences

- University of Pittsburgh, Pennsylvania.
- University of Plymouth, England.

3. SURGICAL TECHNOLOGY PROGRAM

Following the Aspirational Institute of Surgical Technology program, share the vision and mission of DUHS:

- Association of Surgical Technologists, USA
- NIMS College of Paramedical Technology, NIMS University, Jaipur.

4. OPHTHALMIC TECHNOLOGY

Following Aspirational Institute shares the vision and mission of Dow University of Health Sciences

- International Council of Ophthalmology, USA.
- International Joint Commission on Allied Personnel in Ophthalmology.

5. PERFUSION SCIENCES:

The following Aspirational Institutes share the vision and mission of Dow University of Health Sciences.

- Texas Heart Institute.
- Rush University Perfusion Program.
- University of IOWA Perfusion Technology Program.
- Milwaukee School of Engineering Perfusion Program.
- University of Nebraska Perfusion Program.

SECTION IV: STRATEGIC GOALS

Dow Institute of Medical Technology aspires to gain pre-eminence in education and training, select areas of research and innovation, and deliver world-class clinical care with local, re-gional, and global impact. To accomplish these objectives and to use our available resources most judiciously, we have identified the following strategic areas of emphasis for the next decade.
This comprehensive and expansive vision will be accomplished by the following goals:

Goal I: **Implement a Progressive Academic Curriculum**
Goal II: **Establish and implement a Postgraduate Program in Medical Technology**
Goal III: **Executing research projects**
Goal IV: **Establish a state-of-the-art electrophysiological imaging facility (QEEG-LAB)**
Goal V: **Establish Perfusion Simulation Lab**
Goal VI: **Advanced and comprehensive infrastructure for the Medical Technology De-partment, facilitating cutting-edge education, research, and practical training in alignment with the evolving needs of the healthcare industry**

EDUCATIONAL GOALS

Goal I: Implement a Progressive Academic Curriculum

- Integrate interdisciplinary perspectives and cross-cutting themes into the curriculum to encourage holistic understanding and problem-solving across diverse fields and disciplines.
- Introducing courses on AI applications in diagnostics, predictive healthcare, and personalized medicine, offering hands-on training to prepare students for modern healthcare challenges.
- Emphasize project-based learning (PBL) methodologies that engage students in hands-on, collaborative projects addressing real-world challenges and opportunities.
- Provide experiential learning opportunities such as internships, fieldwork, research projects, and community engagement initiatives that connect theory to practice and foster practical skills development.
- Offer courses on telemedicine platforms and electronic health record (EHR) systems to equip students with essential digital healthcare skills.
- Utilize innovative teaching methods, including flipped classrooms, case-based learning, gamification, and multimedia resources to enhance student engagement, motivation, and retention.

- Leverage educational technologies, digital tools, and online resources to facilitate interactive learning experiences, personalized instruction, and asynchronous learning opportunities.
- Incorporate global perspectives, cross-cultural competency training, and international experiences into the curriculum to prepare students for global citizenship and participation in a diverse, interconnected world.
- Emphasize the development of critical thinking, analytical reasoning, and problem-solving skills through inquiry-based learning, Socratic dialogue, and structured problem-solving exercises.
- Encourage creativity, originality, and innovation through project incubators, design thinking workshops, entrepreneurial initiatives, and creative arts integration.
- Foster ethical awareness, social responsibility, and sustainability literacy through discussions, case studies, service-learning projects, and ethical decision-making frameworks.
- Implement continuous feedback mechanisms, formative assessments, and self-reflection activities to monitor student progress, identify learning gaps, and tailor instruction to individual needs.
- Provide opportunities for professional development, mentorship, career counseling, and networking to support students in exploring career pathways, developing industry-specific skills, and transitioning to the workforce or higher education.
- Cultivate adaptability, resilience, and growth mindset through experiential learning challenges, reflective practices, and opportunities for constructive failure and iterative improvement.
- Invest in faculty development programs, pedagogical training, and instructional support services to empower educators in designing, delivering, and assessing innovative curriculum initiatives.
- Foster partnerships with industry leaders, community organizations, government agencies, and alumni networks to co-create curriculum, provide mentorship, and offer experiential learning opportunities.

Goal II: Establish and implement a Postgraduate Program in Medical Technology

- Establish PhD program in addition to the ongoing MPhil program in Medical Technology. Conduct a comprehensive assessment and market analysis to identify demand for postgraduate education in medical technology, emerging trends in healthcare technology, and workforce requirements
- Develop a rigorous and interdisciplinary curriculum that integrates core concepts in medical sciences, engineering principles, biomedical instrumentation, data analytics, regulatory affairs, and healthcare management.

- Design specialized tracks or concentrations based on areas of expertise such as imaging technology, clinical laboratory science, medical informatics, or biomedical engineering.
- Recruit faculty members with expertise in medical technology, clinical practice, research, and industry experience.
- Provide professional development opportunities, research support, and mentoring to faculty to enhance teaching effectiveness, scholarly productivity, and industry collaboration.
- Allocate resources for state-of-the-art laboratories, simulation facilities, computational resources, and technology infrastructure to support hands-on training, research, and innovation.
- Invest in access to cutting-edge medical devices, diagnostic equipment, software platforms, and emerging technologies relevant to the program's focus areas.
- Establish partnerships with healthcare institutions, medical device companies, regulatory agencies, and research centers to provide internship opportunities, industry-sponsored projects, and access to clinical facilities.
- Facilitate experiential learning experiences, industry mentorship, and collaborative research projects that expose students to real-world challenges and opportunities in medical technology.
- Foster interdisciplinary collaboration among faculty, students, and industry partners through seminars, workshops, symposia, and professional networking events.
- Encourage participation in professional societies, conferences, and research consortia to stay abreast of advances in medical technology and promote knowledge exchange.
- Incorporate training on regulatory compliance, quality assurance, patient safety, and ethical considerations into the curriculum to prepare students for roles in healthcare innovation and technology management.
- Provide opportunities for students to engage in discussions, case studies, and projects related to healthcare ethics, privacy, data security, and regulatory requirements.
- Design capstone projects, research, or culminating experiences that allow students to apply theoretical knowledge and practical skills to address complex problems in medical technology.
- Encourage interdisciplinary collaboration, original research, and innovation that contribute to advancements in patient care, diagnostics, therapeutics, and healthcare delivery.
- Offer career counseling, professional development workshops, resume review, and job placement assistance to help students transition to employment opportunities in academia, industry, healthcare organizations, government agencies, and research institutions.
- Cultivate partnerships with employers and alumni networks to facilitate internships, job shadowing, and recruitment opportunities for program graduates.

- Implement mechanisms for ongoing program evaluation, student assessment, alumni feedback, and stakeholder input to monitor program effectiveness, learning outcomes, and alignment with industry standards.
- Use data-driven insights, accreditation standards, and best practices in medical education to inform curriculum revisions, program enhancements, and strategic planning efforts aimed at continuous improvement.

RESEARCH GOALS:

Goal III: Executing research projects

- Initiate research projects dedicated to exploring and implementing cutting-edge technologies in medical diagnostics.
- Execute projects focused on creating novel diagnostic tools that enhance accuracy and effi-ciency in medical testing.
- Investigate the integration of biotechnological advancements to improve the sensitivity and specificity of diagnostic methods.
- Explore and implement molecular diagnostic techniques for the precise identification of dis-eases at the genetic and molecular levels.
- Investigate the use of automation and robotics in diagnostic processes to streamline work-flows and reduce human error.
- Develop and assess point-of-care diagnostic tools for rapid and on-site testing, facilitating quicker decision-making in healthcare settings.
- Explore the application of data analytics and artificial intelligence in analyzing diagnostic da-ta, leading to more accurate and personalized diagnostics.
- Investigate miniaturization and microfluidic technologies to create portable diagnostic devices for improved accessibility and convenience.
- Research and implement biosensors and nanotechnology for the development of highly sensi-tive diagnostic tools, enabling early disease detection.
- Foster collaborations with industry partners to ensure the translation of research findings into practical diagnostic solutions.
- Conduct rigorous clinical validation studies to ensure the reliability and effectiveness of new-ly developed diagnostic tools in real-world healthcare scenarios.
- Establish mechanisms for continuous improvement and optimization of diagnostic technolo-gies based on feedback from clinical use and advancements in the field.
- Develop educational programs to train healthcare professionals in the use of innovative diag-nostic tools, ensuring widespread adoption and utilization in clinical practice.
- Navigate regulatory processes to meet standards and ensure the ethical and safe deployment of newly developed diagnostic technologies in healthcare settings.

Goal IV: Establish a state-of-the-art electrophysiological imaging facility (QEEG-LAB):

- Identify the need and demand for QEEG services in the local or target area.
- Conduct surveys or market research to understand potential users' requirements and expectations.
- Determine the location and size of the facility based on demand and accessibility.

  Plan the layout and design of the laboratory considering technical requirements and user comfort.
- Research and procure high-quality QEEG equipment and software.
- Ensure compatibility and reliability of the equipment for accurate and consistent results.
- Recruit skilled technicians, researchers, and possibly a medical director experienced in QEEG procedures.
- Provide comprehensive training to staff on operating equipment, conducting tests, and interpreting results.
- Ensure compliance with local regulations and standards for medical testing facilities.
- Consider obtaining relevant certifications or accreditations to ensure quality and reliability.
- Establish robust quality control protocols for equipment maintenance, calibration, and data management.
- Implement procedures for ensuring data accuracy, security, and confidentiality.
- Develop protocols for patient scheduling, preparation, and aftercare.
- Focus on providing a comfortable and supportive environment for patients undergoing QEEG procedures.
- Foster collaborations with researchers, clinicians, and institutions to explore new applications and advancements in QEEG technology.
- Participate in clinical trials or research studies to contribute to the field and enhance the facility's reputation.
- Develop a marketing strategy to promote the facility's services to potential users, including healthcare providers, researchers, and patients.
- Utilize online platforms, professional networks, and educational events to raise awareness and attract clients.
- Regularly assess and review facility operations, patient feedback, and technological advancements.
- Implement changes and upgrades as necessary to maintain the facility's state-of-the-art status and meet evolving needs.

Goal V: Establish Perfusion Simulation Lab:

- Identify the demand for perfusion training and simulation in healthcare education programs, particularly in fields such as cardiovascular perfusion, anesthesia, and critical care.
- Assess the availability of similar simulation labs in the region and determine the need for additional resources.
- Determine the physical space requirements for the Perfusion Simulation Lab, considering factors such as room size, layout, ventilation, and accessibility.
- Plan the layout and design of the lab to accommodate perfusion equipment, simulation manikins, monitoring devices, and workstations.
- Research and procure perfusion simulation equipment, including perfusion pumps, oxygenators, heat exchangers, tubing, cannulas, and monitoring devices.
- Ensure that the equipment replicates real-world perfusion scenarios and meets educational objectives.
- Acquire high-fidelity simulation manikins and models that accurately replicate human anatomy and physiological responses during perfusion procedures.
- Invest in models with interchangeable vascular access points, blood vessels, and tissue compartments to simulate various clinical scenarios.
- Develop structured training programs and simulation scenarios for students and healthcare professionals to practice perfusion techniques, cannulation, circuit setup, and troubleshooting.
- Provide hands-on training sessions facilitated by experienced perfusionists and educators.
- Collaborate with educational institutions to integrate perfusion simulation training into relevant curricula and certification programs.
- Align simulation activities with learning objectives, competencies, and accreditation standards for healthcare education.
- Establish protocols for quality assurance, equipment maintenance, and infection control to ensure a safe and hygienic learning environment.
- Implement standardized procedures and checklists for simulation exercises to promote consistency and best practices.
- Facilitate inter-professional education by inviting students and professionals from various healthcare disciplines to participate in multidisciplinary simulation scenarios. Foster collaboration, communication, and teamwork among perfusionists, surgeons, anesthesiologists, nurses, and other members of the healthcare team.
- Develop assessment tools and performance metrics to evaluate learners' proficiency, clinical reasoning, and technical skills during simulation exercises.

- Provide constructive feedback and debriefing sessions to enhance learning outcomes and reflective practice.
- Promote the Perfusion Simulation Lab to healthcare institutions, professional associations, and industry partners to raise awareness and attract participants.
- Showcase the benefits of simulation-based training in improving patient safety, clinical competence, and teamwork skills.

Goal VI: Advanced and comprehensive infrastructure for the Medical Technology Department, facilitating cutting-edge education, research, and practical training in alignment with the evolving needs of the healthcare industry:

- Establish specialized laboratories equipped with advanced medical technology instruments and equipment relevant to various disciplines such as medical imaging, clinical laboratory science, Perfusion sciences, Respiratory and Critical Care Technology, Surgical Technology, and health informatics.
- Ensure access to modern diagnostic devices, imaging modalities, laboratory analyzers, and simulation equipment for hands-on training and research purposes.
- Design collaborative workspaces and interdisciplinary research hubs that facilitate interaction and knowledge sharing among students, faculty, researchers, and industry partners.
- Foster a culture of collaboration and innovation by promoting cross-disciplinary projects and research initiatives that address complex healthcare challenges.
- Allocate resources for research infrastructure, including molecular biology laboratories, bioinformatics centers, tissue culture facilities, and high-performance computing clusters.
- Provide access to cutting-edge technologies and research tools for conducting translational research, clinical trials, and data-driven analyses to advance medical knowledge and patient care.
- Upgrade classrooms, lecture halls, and seminar rooms with multimedia capabilities, interactive displays, and teleconferencing systems to facilitate dynamic and engaging educational experiences.
- Integrate virtual reality (VR), augmented reality (AR), and simulation-based learning platforms to enhance student engagement, critical thinking, and clinical decision-making skills.
- Develop fully equipped clinical simulation centers featuring high-fidelity patient simulators, task trainers, virtual patient scenarios, and standardized patient programs.
- Offer immersive learning experiences that replicate real-world clinical environments, enabling students to practice clinical skills, communication techniques, and interprofessional teamwork in a safe and controlled setting.

- Invest in robust health information technology (HIT) infrastructure, including electronic health record (EHR) systems, health data analytics platforms, and telehealth solutions.
- Integrate HIT systems into the curriculum to familiarize students with digital health tools, interoperability standards, and data privacy regulations shaping modern healthcare delivery.
- Provide access to professional development resources, continuing education programs, and certification preparation courses to support lifelong learning and career advancement for faculty, staff, and students.
- Foster mentorship and networking opportunities with industry leaders, clinical experts, and alumni to cultivate a culture of excellence and innovation within the department.
- Forge strategic partnerships with healthcare organizations, industry stakeholders, and research institutions to facilitate internships, clinical rotations, and experiential learning opportunities for students.
- Establish collaborative projects and joint ventures that enable students to apply classroom knowledge to real-world problems, gain practical experience, and develop professional competencies aligned with industry needs.
- Implement mechanisms for continuous quality improvement, program evaluation, and outcomes assessment to monitor the effectiveness of educational interventions and research initiatives.
- Solicit feedback from stakeholders, alumni, and employers to identify areas for improvement, innovation, and strategic growth within the Medical Technology Department.
- Embrace a culture of adaptability, agility, and innovation to respond to evolving trends, technological advancements, and emerging healthcare challenges.
- Stay abreast of industry developments, regulatory changes, and best practices to ensure that educational programs and research endeavors remain relevant, impactful, and forward-looking in the dynamic healthcare landscape.

OBJECTIVES, OKRs & KPIs

Strategic Goal 1: Implement a Progressive Academic Curriculum							
Goal Statement: Enhance the academic curriculum by integrating interdisciplinary perspectives, innovative teaching methodologies, and experiential learning opportunities to prepare students for the evolving demands of the healthcare industry.							
OKR (Objective and Key Results)							
Objective 1: Integrate Interdisciplinary Perspectives and Innovative Teaching Methods							
Objective	**Key Results**	**KPI**	**Measurement Method**	**Target**	**Person Responsible**	**Resource Requirement**	**Timeline**
Develop and implement a curriculum that fosters holistic understanding, critical thinking, and problem-solving skills through interdisciplinary and innovative teaching approaches.	KR1: Integrate interdisciplinary courses into the curriculum for 100% of programs by the next academic year.	KPI 1: Several interdisciplinary courses were introduced.	Curriculum review reports.	100% of programs have interdisciplinary courses.	Program Coordinator Faculty	Faculty Training, Curriculum Design Tools	100% of programs with inter-disciplinary courses by within 12 months.
	KR2: Introduce at least three new innovative teaching methods (e.g., flipped classrooms, case-based learning) across all programs within 6 months.	KPI 2: Student engagement and satisfaction scores.	Student surveys and feedback.	Three new teaching methods were implemented	Program Coordinators Faculty	Faculty Training and Workshops, Collaboration with Industry Experts, Technology for Learning Management Systems (LMS)	3 new teaching methods implemented by within 12 months.

Objective 2: Enhance Experiential Learning and Practical Skills Development							
Objective	**Key Results**	**KPI**	**Measurement Method**	**Target**	**Person Responsible**	**Resource Requirement**	**Timeline**
Provide students with hands-on learning experiences that bridge the gap between theory and practice, ensuring they are well-prepared for real-world healthcare challenges.	KR2.1: Establish partnerships with five healthcare institutions to offer internships and fieldwork opportunities by the end of the year.	KPI 2.1: Number of partnerships established.	Partnership agreements.	5 partnerships	Director, Program Coordinators	Staff for Outreach & Networking, Legal & Contractual Support	05 partnerships within 12 months.
	KR2.2: Increase student participation in experiential learning programs by 50% within one year.	KPI 2.2: Student participation rates in experiential learning.	Student enrollment and completion data for experiential programs.	50% increase in participation	Director, Program Coordinators	Partnerships with Industry, Faculty Support for Mentorship	50% increase in participation on by within 12 months

Strategic Goal 2: Establish and Implement a Postgraduate Program in Medical Technology							
Goal Statement: Develop and launch a postgraduate program in medical technology that addresses emerging trends, meets industry needs, and prepares graduates for advanced roles in healthcare.							
OKR (Objective and Key Results)							
Objective 1: Develop a Rigorous and Interdisciplinary Postgraduate Curriculum							
Objective	**Key Results**	**KPI**	**Measurement Method**	**Target**	**Person Responsible**	**Resource Requirement**	**Timeline**
Create a postgraduate program that integrates core medical sciences, engineering, and healthcare management to provide comprehensive training in medical technology.	KR1.1: Finalize the postgraduate curriculum and receive approval from academic boards within 9 months.	KPI 1.1: Curriculum approval status.	Curriculum documentation and approval records.	Curriculum approved within 9 months.	Director, Program Coordinators	Faculty, Industry Experts, Academic Boards	Curriculum approved within 9 months.
	KR1.2: Launch the first cohort with at least 25 enrolled students within 1 year of program approval.	KPI 1.2: Enrollment numbers in the postgraduate program.	Enrollment records.	25 students in the first cohort.	Director, Program Coordinators	Faculty and Staff for Program Delivery, Technology Infrastructure for Enrollment and Course Delivery	25 students in the first cohort within 1 year
	KR 1.3: Finalize the PhD curriculum and receive approval from academic boards within 12 months.	KPI 1.3: Curriculum approval status.	Curriculum documentation and approval records.	Curriculum approved within 12 months.	Principal, Program Director, Program Coordinators	Faculty, Academic Boards	Obtain approval until March 2026.

Objective 2: Establish State-of-the-Art Facilities for Postgraduate Training							
Objective	**Key Results**	**KPI**	**Measurement Method**	**Target**	**Person Responsible**	**Resource Requirement**	**Timeline**
Allocate resources and develop facilities that provide hands-on training and research opportunities for postgraduate students in medical technology.	KR2.1: Establish two state-of-the-art laboratories equipped with the latest medical technology instruments within 1 year.	KPI 2.1: Number of laboratories established.	Laboratory development and equipment purchase records.	2 laboratories	Director, Program Coordinators	Construction and Renovation Budget,	2 laboratories within 1-2 years.
	KR2.2: Secure partnerships with three industry leaders to provide access to cutting-edge technologies for student training.	KPI 2.2: Number of industry partnerships secured.	Partnership agreements.	3 industry partnerships	Director, Program Coordinators	Training and Support for Faculty and Students, Outreach and Negotiation Team, Funding for Technology Integration	3 industries partnerships within 2 years

Strategic Goal 3: Execute Research Projects in Medical Technology							
Goal Statement: Advance the field of medical technology by executing research projects that focus on innovation, improving diagnostic tools, and integrating biotechnological advancements.							
OKR (Objective and Key Results)							
Objective 1: Initiate High-Impact Research Projects							
Objective	**Key Results**	**KPI**	**Measurement Method**	**Target**	**Person Responsible**	**Resource Requirement**	**Timeline**
Launch and execute research projects that explore cutting-edge technologies in medical diagnostics, with a focus on innovation and practical application.	KR1.1: Secure funding for five research projects focused on medical diagnostics within 1 year.	KPI 1.1: Number of research projects funded.	Research funding and grant records.	5 funded projects.	Faculty Researchers Research Director	Research Grant Databases and Subscriptions, Partnerships with Funding Agencies, Internal Budget Allocation for Seed Funding	03 funded projects within 2 years.
	KR1.2: Publish 10 peer-reviewed research papers annually from these projects.	KPI 1.2: Number of peer-reviewed publications	Publication data from academic journals.	10 publications per year.	Principal Investigators Faculty Researchers	Funding for Research and Publication Fees, Writing and Editing Support	5 publications per year.

Objective 2: Foster Industry Collaboration for Research Translation							
Objective	**Key Results**	**KPI**	**Measurement Method**	**Target**	**Person Responsible**	**Resource Requirement**	**Timeline**
Collaborate with industry partners to translate research findings into practical solutions for healthcare, ensuring real-world impact and innovation.	KR 2.1: Establish three collaborations with industry partners for research translation within 1 year.	KPI 2.1: Number of industry collaborations	Collaboration agreements.	3 collaborations	Principal Investigators Faculty Researchers	Funding for Collaborative Research, Partnership Development Team	3 collaborations within 2 years.
	KR2.2: Commercialize at least one innovative diagnostic tool developed through research within 2 years.	KPI 2.2: Several commercialized products.	Product commercialization records.	1 commercialized product.	Dean of Research and Innovation	Funding for Product Development and Prototype Testing, Partnerships with Industry and Commercialization Experts	1 commercialized product within 2 years.

Strategic Goal 4: Establish a State-of-the-Art Electrophysiological Imaging Facility (QEEG-LAB)							
Goal Statement: Develop a cutting-edge QEEG-LAB to enhance research and clinical capabilities in electrophysiological imaging, addressing critical needs in neurological diagnostics.							
OKR (Objective and Key Results)							
Objective 1: Establish the Facility and Procure Equipment							
Objective	**Key Results**	**KPI**	**Measurement Method**	**Target**	**Person Responsible**	**Resource Requirement**	**Timeline**
Set up a QEEG-LAB with state-of-the-art equipment and infrastructure to support advanced research and clinical diagnostics.	KR1.1: Procure and install QEEG equipment and software within 6 months.	KPI 1.1: Completion of equipment procurement	Procurement and installation records.	100% equipment installation.	Director, Program Coordinators	Budget for Equipment and Software, Staff Training for Equipment Operation	100% equipment installation within 6 months
	KR 1.2: Train 100% of the lab staff in the new equipment and procedures within 3 months of post-installation.	KPI 1.2: Staff training completion rate.	Staff training logs.	100% staff trained.	Director, Program Coordinators	Training Materials and Manuals, Budget for Training Sessions	100% staff trained within 3 months post-installation
Objective 2: Promote Research and Clinical Use of the QEEG-LAB							
Objective	**Key Results**	**KPI**	**Measurement Method**	**Target**	**Person Responsible**	**Resource Requirement**	**Timeline**
Utilize the QEEG-LAB for cutting-edge research and clinical applications, positioning the institute as a leader in electrophysiological imaging.	KR 2.1: Publish five research papers on QEEG technology within the first year of operation.	KPI 2.1: Several research publications	Publication data.	5 research papers.	Principal Investigators Faculty Researchers	Funding for Research and Publication Fees, Collaborations with Research Networks	2 research papers within the first year of operation.
	KR 2.2: Attract three clinical research collaborations with local hospitals within 1 year.	KPI 2.2: Number of clinical collaborations.	Collaboration agreements.	3 clinical collaborations.	Director, Principal Investigators Faculty Researchers	Research Collaboration Budget, Legal and Contractual Resources	3 clinical collaborations within 2 years.

Strategic Goal 5: Establish a Perfusion Simulation Lab							
Goal Statement: Develop a Perfusion Simulation Lab to provide advanced training in perfusion techniques, enhancing the quality of education and patient care in cardiovascular surgery.							
OKR (Objective and Key Results)							
Objective 1: Develop the Lab Infrastructure and Procure Equipment							
Objective	**Key Results**	**KPI**	**Measurement Method**	**Target**	**Person Responsible**	**Resource Requirement**	**Timeline**
Establish a fully equipped Perfusion Simulation Lab that meets the educational and training needs of students and healthcare professionals.	KR1: 1.1 Complete the lab setup and procurement of simulation equipment within 1 year.	KPI 1.1: Completion of lab setup.	Setup and procurement records.	100% lab setup.	Director, Program Coordinators	Budget for Equipment and Software, Staff Training for Equipment Operation	100% lab setup within 2 years.
	KR 1.2: Launch 3 simulation-based training programs within 6 months post-setup.	KPI 1.2: Number of training programs launched.	Program enrollment data.	3 training programs.	Director, Program Coordinators	Training Materials and Manuals, Budget for Training Sessions	3 training programs within 1 Year post-setup.
Objective 2: Integrate the Simulation Lab into Academic and Professional Training							
Objective	**Key Results**	**KPI**	**Measurement Method**	**Target**	**Person Responsible**	**Resource Requirement**	**Timeline**
Incorporate the Perfusion Simulation Lab into the curriculum and continuing education programs to enhance practical training in perfusion sciences.	KR1: 2.1: Integrate simulation training into 100% of relevant academic courses within 1 year.	KPI 2.1: Percentage of courses with integrated simulation.	Course curriculum records.	100% course integration.	Director, Program Coordinators	Simulation Equipment and Software, Faculty Training on Simulation Integration	100% course integration within 1 year post setup
	KR 2.2: Increase student proficiency in perfusion techniques by 30% as measured by simulation assessments.	KPI 2.2: Proficiency improvement rate.	Simulation assessment scores.	30% proficiency improvement	Director, Simulation Lab Coordinator Faculty	Simulation labs, expert instructors, training materials, assessment tools, and consumables	30% proficiency improve-ment within 1 year post setup

Strategic Goal 6: Develop Advanced Infrastructure for the Medical Technology Department							
Goal Statement: Build and maintain advanced infrastructure that supports cutting-edge education, research, and practical training in medical technology, aligning with the evolving needs of the healthcare industry.							
OKR (Objective and Key Results)							
Objective 1: Establish Specialized Laboratories and Research Hubs							
Objective	**Key Results**	**KPI**	**Measurement Method**	**Target**	**Person Responsible**	**Resource Requirement**	**Timeline**
Develop specialized laboratories and interdisciplinary research hubs that facilitate hands-on training, innovative research, and collaboration among students, faculty, and industry partners.	KR 1.1: Establish four specialized laboratories for different medical technology disciplines within 18 months.	KPI 1.1: Number of laboratories established.	Laboratory and hub establishment records.	4 laboratories	Program Director, Procurement Officer.	Lab space, specialized equipment, consumables funding, and technicians.	4 laboratories within 3 years.
	KR 1.2: Create two interdisciplinary research hubs to foster collaboration by the end of the next academic year.	KPI 1.2: Number of research hubs created.	Research output from hubs.	2 research hubs.	Research Coordinator, Program Director,	Dedicated space, research equipment, funding, faculty and student engagement plans	2 research hubs end of the next academic year.

Objective 2: Upgrade Educational Facilities and Integrate Advanced Technologies							
Objective	**Key Results**	**KPI**	**Measurement Method**	**Target**	**Person Responsible**	**Resource Requirement**	**Timeline**
Enhance classrooms, lecture halls, and simulation centers with modern technology and interactive learning platforms to improve educational outcomes and student engagement.	KR 1.1: Upgrade 100% of classrooms and lecture halls with interactive technology and multimedia within 1 year.	KPI 1.1: Percentage of upgraded classrooms.	Facility upgraded records.	100% classroom upgrade.	IT Manager, Facilities Manager, Program Director.	Interactive boards, projectors, sound systems, funding, installation technicians, and training for faculty.	100% classroom upgrade within 3 year
	KR 1.2: Integrate virtual reality (VR) and augmented reality (AR) tools into three major courses within 2 years.	KPI 1.2: Several courses use VR/AR tools.	Course curriculum updates.	3 courses with VR/AR.	Curriculum Development Team, IT Manager, Course Instructors.	VR/AR devices, software licenses, training for instructors, technical support, and funding for implement-ation.	3 courses with VR/AR within 2 years.

MEASURABLE OUTCOMES

MEASURABLE OUTCOMES OF CLINICAL LABORATORY SCIENCE

Upon the completion of the clinical laboratory science program, students will be able to:

1. Students will demonstrate technical competence to perform clinical laboratory tests and procedures with precision and adherence to national and international standards.
2. Students will exhibit critical thinking and problem-solving skills in analyzing clinical data, identifying abnormalities, and making informed decisions for patient-centered care while applying evidence-based practices.
3. Students will actively engage with the local community through community health initiatives, promoting health education, and participating in outreach programs.
4. Students will commit to lifelong learning and professional development, staying current with advancements in Clinical Laboratory Science. They will demonstrate a compassionate and cooperative attitude in patient care, teamwork, and interactions with healthcare colleagues.

MEASURABLE OUTCOMES OF RESPIRATORY AND CRITICAL CARE

Upon the completion of the Respiratory and Critical Care Technology program, students will be able to:

1. Degree of skills and capabilities that will reflect on their performance as “respiratory and critical care technologists."
2. Demonstrate the ability to evaluate, assess, and apply interventions in areas of respiratory care, including sleep medicine, neonatal and pediatric care, adult critical care, and respiratory case management.
3. Demonstrate appropriate critical thinking and problem-solving skills, time management skills, interpersonal communication skills, and technical skills necessary to provide competent respiratory care in multidisciplinary care settings.
4. Execute practical experience of the techniques and procedures routinely performed in clinical settings in the ICU, CCU, and emergency department.

5. Develop and put into practice transformational leadership ideas in the healthcare industry to provide an inclusive environment for decision-making.
6. Develop ethical leadership skills in professional practice and community service.
7. Demonstrate efficient knowledge and expertise in establishing an evidence base for best practices through research and the critique and interpretation of professional scientific literature in respiratory care.

MEASURABLE OUTCOMES OF SURGICAL TECHNOLOGY

Upon successful completion of the Surgical Technologist program, the students will be able to:

1. Main elements of the strategic plan to achieve program mission and objectives:
2. Offer valuable Professional education that engages students in the professional practice of Surgical Technology at national and international levels compatible with the delivery of 21st-century health care.
3. Strengthen Students' capacity for research, novelty, learning, and application of sound knowledge of the Surgical Technology program with the standard of practices.
4. Provide evidence-based surgical technology patient care of the highest quality to various surgical spatiality O.Ts.
5. Act as an integral part of the surgical suite to expand and sustain a productive collaboration with the healthcare sector /community.
6. Attract and retain a qualified and highly productive faculty by developing educational/training opportunities to maintain a proactive institutional environment.
7. Increase institutional, academic, and operational efficiency by distributing departmental resources based on strategic priorities.

MEASURABLE OUTCOMES OF OPHTHALMIC TECHNOLOGY

Degree of skills and capabilities that will reflect on their performance as an ophthalmic technologist:

1. Students shall have the capability to apply knowledge of Basic science and fundamentals related to ophthalmology.
2. Students shall have the skill to identify, formulate, and solve practical problems related to the conduct of ophthalmology in various types of eye surgeries.
3. Students shall have the ability to use modern tools, techniques, and skills necessary for practicing eye surgeries and instrumentation.
4. Students will be able to communicate professionally with patients and healthcare providers and able to demonstrate the necessary training in moralistic and clinical skills needed to improve patients' care.

5. Students shall have the ability to collaborate effectively in teams, including OR teams and ophthalmic society, to solve problems relevant to their field/case.
6. Students will seek employment in the Health Sector, eye Research Laboratory, and Research and Development department in hospital and academic settings.

MEASURABLE OUTCOMES OF PERFUSION SCIENCES

Degree of skills and capabilities that will reflect on their performance as Percussionist:

1. Students shall have the capability to apply knowledge of Basic science and fundamentals related to Perfusion Sciences.
2. Students shall have the skill to identify, formulate, and solve practical problems related to the conduct of perfusion in various types of cardiac surgeries.
3. Students can use modern tools, techniques, and skills necessary for practicing perfusion sciences, including ECMO and instrumentation.
4. Students will be able to communicate professionally with patients and healthcare providers and able to demonstrate the necessary training in moralistic and clinical skills needed to improve patients' care.
5. Students shall have the ability to collaborate effectively in teams, including OR teams and Perfusionist society, to solve problems relevant to their field/case.
6. Students will seek employment in the Health Sector, Research Laboratory, and Research and Development department in hospital and academic settings.

SECTION V: RESOURCE PLANNING FOR ACHIEVING STRATEGIC GOALS

DIMT has efficiently and effectively utilized all available resources to:

- Streamline functions and create a synergistic organization.
- Contain and reduce costs.
- Enhance productivity.
- Ongoing reallocation and redeployment of resources.

The institute will establish priorities for expenditures that are informed and guided by the DIMT Strategic Plan.

RESOURCES UTILIZED

- We have recently established a molecular lab equipped with a PCR machine, benefiting both undergraduate and postgraduate students.
- A facility for Quantitative Electroencephalography (QEEG) equipment has been built to benefit research students and patients.
- Space for a girls' common room has been created, utilizing minimal resources.
- Six faculty offices have been constructed to accommodate twelve faculty members.

RESOURCES REQUIRED

- DIMT should have separate buildings and well-equipped laboratories for all technologies, facilitating advanced research for undergraduate and postgraduate students. This building should include patient facilities, a molecular lab, a simulation lab for Perfusion Sciences technology, an auditorium, and a girls' common room for students.
- Faculty members require proper workspace for lecture preparations and guiding students by conducting meetings to resolve study-related issues and provide future career counseling.
- As we have initiated the M.Phil. program, enhancing research activity is necessary for students to attain their postgraduate degrees. In the future, a separate building will be necessary for the growth of the institute as the number of seats will increase for the Ph.D. program.

SECTION VI: IMPLEMENTATION AND MONITORING OF STRATEGIC PLAN

Dow Institute of Medical Technology (DIMT) has meticulously identified meaningful Key Performance Indicators (KPIs). These KPIs will undergo regular monitoring to oversee the effective implementation of the DIMT strategic plan spanning from 2024 to 2027. The evaluation of these KPIs will ensure the success of the strategic plan.

Regular and comprehensive reports, grounded in these KPIs, will be generated and disseminated to the relevant authorities, utilizing progress indicators and metrics. These reports will play a crucial role in influencing and guiding the execution of the strategic plan, ensuring the timely accomplishment of milestones in the realm of Medical Technology.

To become a leader in medical technology research, the institution plans to conduct a thorough needs assessment, invest in cutting-edge infrastructure, assemble top-tier multidisciplinary teams, and foster collaborations to ensure sustained success, positioning the institution among frontrunners in medical technology research.

To improve curriculum, a collaborative framework will be established, current programs will be regularly assessed, and faculty will be encouraged to propose innovative ideas, a dynamic feedback loop will be implemented to ensure continuous improvement and relevance in response to evolving educational needs.

Achieving continuous improvement in teaching methods requires a systematic approach. Regular evaluations will be implemented through student feedback and peer reviews. Professional development opportunities will be facilitated for faculty, encouraging the adoption of innovative academic approaches and fostering a culture of ongoing improvement.

Setting a high standard for postgraduate education involves meticulous planning. To achieve this goal, faculty excellence will be fostered, a competitive selection process will be ensured, and comprehensive, updated curricula will be implemented. Moreover, regular assessments will be incorporated to maintain academic quality and relevance in the postgraduate program.

Establishing a cutting-edge medical technology facility entails strategic steps. State-of-the-art equipment will be acquired for Quantitative Electroencephalography (QEEG), spirometry, and perfusion simulation lab. A hands-on practice curriculum will be designed for the students, integrating experiential learning to enhance skills and knowledge in the respective fields.

SECTION VII: LIST OF APPENDICES

No.	DESCRIPTION
A	SWOT ANALYSIS
B	TOWS MATRIX

APPENDIX A:
SWOT ANALYSIS

STRENGTHS	WEAKNESS
1. HEC Recognized. **2.** Brand value and image. **3.** Minimum dropout ratio **4**. Skills lab **5.** Market-compatible fee structure	**1.** Limited resources **2.** Short internship duration **3.** No research budgets. **4.** Faculty deficiency & demoralization. **5.** Non supportive infrastructure
OPPORTUNITIES	**THREATS**
1. Liaison with multiple healthcare setups. **2.** Development and further enhancement of skill/simulation lab. **3.** Experienced faculty for research **4.** Initiation of postgraduate program **5.** Graduates are eligible for the international job market amid certifications	**1.** Regulatory and Accreditation Requirements **2.** Unable to retain trained and skilled faculty. **3.** Job Saturation

APPENDIX B:
TOWS MATRIX

	Opportunities	Threats
	1. Liaison with multiple healthcare setups. **2.** Development and further enhancement of skill/simulation lab. **3.** Experienced faculty for research **4.** Initiation of postgraduate program **5.** Graduates are eligible for the international job market amid certifications	**1.** Regulatory and Accreditation Requirements **2.** Unable to retain trained and skilled faculty. **3.** Job Saturation
Strengths	**SO**	**ST**
1. HEC Recognized. **2.** Brand value and image. **3.** Minimum dropout ratio **4.** Skills lab **5.** Market-compatible fee structure	**1.** Expand Clinical and Research Collaborations: • Action: Utilize the institute's strong brand value, HEC recognition, and AHPC accreditation to establish and strengthen collaborations with external institutions for clinical practicums and research initiatives. • Implementation: Form partnerships with top healthcare institutions and universities to offer students and faculty access to advanced clinical settings and research facilities.	**1.** Strengthen Faculty Retention Programs: • Action: Utilize the institute's brand value, accreditation, and market-compatible fee structure to develop attractive faculty retention packages that include professional development opportunities, competitive salaries, and recognition programs. • Implementation: Implement mentorship programs, provide research grants, and create pathways for faculty career advancement to retain trained and skilled faculty members.

	2. Launch Postgraduate Programs: • Action: Capitalize on the market-compatible fee structure and strong brand image to initiate postgraduate programs that cater to the evolving needs of the healthcare sector. • Implementation: Develop curriculum and secure necessary resources and faculty to offer specialized postgraduate programs that attract experienced professionals and fresh graduates aiming for higher qualifications. **3.** Enhance International Job Market Competitiveness: • Action: Leverage the institute's accreditation and skilled lab facilities to provide certifications that enhance graduates' eligibility for the international job market. • Implementation: Offer specialized training and certification programs aligned with international standards to boost graduates' employability globally.	**2.** Adapt to Regulatory and Accreditation Requirements: • Action: Leverage the institute's existing accreditations (HEC, AHPC) and liaison with healthcare setups to stay ahead of regulatory changes and maintain compliance with accreditation standards. • Implementation: Establish a dedicated compliance team to monitor and adapt to changing regulatory requirements, ensuring continuous accreditation and high standards in education. **3.** Differentiate from Market Saturation: • Action: Utilize the institute's brand value and minimum dropout ratio to differentiate its programs from competitors in a saturated market by emphasizing quality, successful outcomes, and strong industry linkages. • Implementation: Launch targeted marketing campaigns highlighting the institute's strengths and success stories of graduates, particularly focusing on unique programs and employment rates.

Weaknesses	WO	WT
1. Limited resources **2.** Short internship duration **3.** No research budgets. **4.** Faculty deficiency & demoralization. **5.** Non supportive infrastructure	**1.** Enhance Research Capabilities through Collaborations: • Action: Address the inadequacy of research budgets and limited resources by collaborating with outside institutions and experienced faculty for joint research initiatives and resource sharing. • Implementation: Establish partnerships with research-focused institutions to secure joint funding opportunities, share research facilities, and co-author publications, thereby enhancing the institute's research output. **2.** Faculty Development and Morale Improvement: • Action: Leverage the opportunity of collaborating with experienced faculty from other institutions to enhance internal faculty capabilities, address deficiencies, and boost morale.	**1.** Secure Funding to Counter Resource Limitations and Faculty Retention Issues: • Action: Address limited resources and faculty retention challenges by actively seeking external funding, endowments, and partnerships to enhance financial stability. • Implementation: Develop a strategic fundraising plan targeting government grants, private sector partnerships, and alumni donations. Use funds to improve faculty compensation, research budgets, and resources. **2.** Develop a Faculty Retention and Development Plan: • Action: Combat faculty deficiency and demoralization by creating a comprehensive faculty retention and development plan that includes competitive salaries, professional growth opportunities, and recognition.

	• Implementation: Organize faculty exchange programs, workshops, and seminars with experts from partner institutions to provide professional development and recognition, improving faculty engagement and satisfaction. **3.** Resource Optimization for Postgraduate Program Initiation: • Action: Mitigate resource limitations by strategically allocating available resources and seeking external funding to initiate postgraduate programs. • Implementation: Apply for grants, allocate existing resources efficiently, and partner with industry stakeholders to secure the necessary funds and support for launching high-demand postgraduate programs.	• Implementation: Conduct regular faculty assessments to identify needs, create tailored development programs, and offer incentives such as research grants, sabbaticals, and career advancement opportunities. **3.** Mitigate Market Saturation Risk through Program Differentiation: • Action: Differentiate the institute's programs in a saturated market by offering unique, high-quality educational experiences that are supported by strong industry links and practical training opportunities. • Implementation: Introduce niche programs that address unmet needs in the market, such as specialized certifications, and emphasize the institute's strong placement rates and industry partnerships in marketing efforts.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