

# PROSPECTUS 2025



**Indus Hospital & Health Network (IHHN)-Blood Center,  
Karachi**

**IHHN-Regional Blood Center, Jamshoro**

**IHHN-Regional Blood Center, Bahawalpur**

**IHHN-Regional Blood Center, Multan**



**REGIONAL  
BLOOD CENTER**

**BAHAWALPUR**



**REGIONAL BLOOD  
CENTER**

**JAMSHORO**



**REGIONAL BLOOD  
CENTER**

**MULTAN**



**BLOOD CENTER**

**KARACHI**

# MESSAGE FROM SENIOR DIRECTOR

In a short span of 13 years, the implementation of the 'Safe Blood Transfusion Program' through the Pakistan-German Government Partnership has brought blood transfusion medicine to the forefront, making blood safety a core priority within the health sector. Fully equipped large regional blood centres and hospital blood banks have been established, along with revamping existing blood banks. These reforms have resulted in a high demand for skilled and educated medical technologists in blood transfusion medicine.

Responding to the market need, the first of its kind 'Associate Degree in Blood Transfusion Medicine' program was launched in 2021 by the Indus Hospital & Health Network (IHHN), in affiliation with the National University of Medical Sciences (NUMS), simultaneously in Karachi, Jamshoro, Multan, and Bahawalpur. The curriculum was developed in 2021 and revised in 2023 as HEC's UGE policies with an applied and focused approach, in close consultation with experts drawn from blood banking and haematology, providing a solid general education background and developing specialised knowledge and skills essential for blood bank technologists.

The Associate Degree in Blood Transfusion Technology (AD-BTT)-revised title per AHPC, Pakistan, is not just a degree but a focused skill-based program designed to prepare HSC Pre-medical students for the challenging and growing field of Blood Transfusion Medicine. We place a strong emphasis on hands-on practical training sessions in identical skills labs on all four campuses, equipped with state-of-the-art equipment and experienced trainers. This program aspires to produce the next generation of blood banking workforce, addressing local and global requirements. The rapidly increasing demand for proficient blood bank technologists will ensure the marketability and employability of the graduates. The AD-BTT program will play a pivotal role in fulfilling demand-driven human capital development in blood banking, which is critical for Pakistan.



**Dr. Saba Jamal**

**Senior Director,**

**Pathology & Blood Transfusion Services**

# ASSOCIATE DEGREE IN BLOOD TRANSFUSION TECHNOLOGY

A 2-year Associate Degree in Blood Transfusion Technology (AD-BTT) is awarded by the University to pre-medical/medical technology post-intermediate or equivalent academic certificate holders. The core requirement of the Associate Degree Programme is its link with the local and global marketplace requirements.

Indus Hospital & Health Network (IHHN), in affiliation with the National University of Medical Sciences (NUMS), offers this degree Programme for the most critical healthcare segment, Blood Banking, to fulfil the need for technologists and supervisory staff. The prime motive of this Programme has been to make available accredited qualifications by providing quality technical education and skill training in the blood banking technology of Allied Health Sciences.

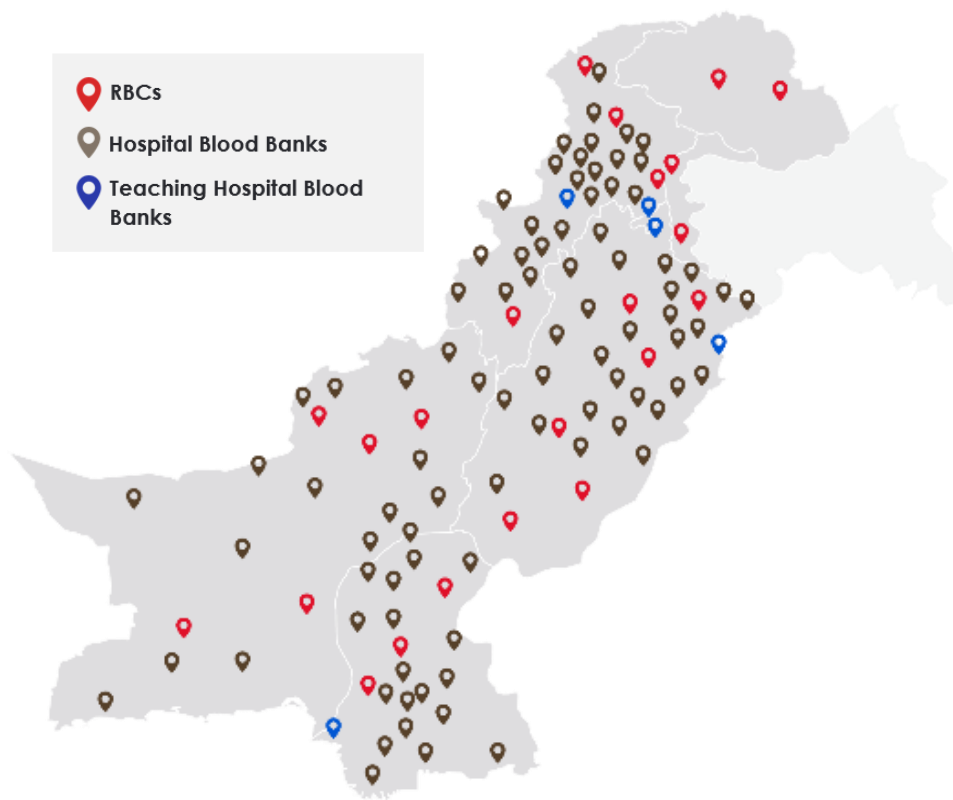
 <b>VISION</b> <p>Enable the provision of the safest possible blood, meeting international standards, to all segments of society.</p>	 <b>GOAL</b> <p>To lead the way in providing high-quality education and professional development.</p>
 <b>MISSION</b> <p>To educate the students in skills and techniques relevant to blood banking and blood transfusion, promoting safe blood transfusion at their workplace, both nationally and internationally</p>	 <b>COMPETENCIES</b> <ul style="list-style-type: none"><li>o Integrity</li><li>o Technical Proficiency</li><li>o Life-long Commitment to Learning</li><li>o Effective Communication</li><li>o Adaptability to Inter-disciplinary Approach</li></ul>

## LEARNING OUTCOMES:

At the end of the course, the students will be able to:

- Apply the basic principles of blood banking and blood transfusion at their workplace.
- Perform necessary practical procedures, undertaking safety measures related to blood collection, blood component preparation, basic transfusion-transmitted infections testing, immunohematology, and quality assurance (QA) in blood banking, along with the relevant basic haematology as per the international standards, including the Association for the Advancement of Blood and Biotherapies (AABB).
- Perform first aid and basic life support measures as per the American Heart Association (AHA) whenever required.
- Exhibit effective communication and computer skills.
- Demonstrate ethical and professional behaviour at their workplaces.

## EMPLOYMENT PROSPECTS



# Student Professional Conduct

AD-BTT students shall adhere to intellectually and socially coherent, respectful and culturally inclusive Professional and Performance Conduct and Codes.

**Integrity:** In carrying out their professional duties, students must be honest, sincere, and trustworthy, acting in a manner that does not discredit the profession.

**Respect:** Students must ensure their actions and conduct demonstrate respect for ALL, including their teaching and non-teaching faculty, fellow students, patients, and other personnel they encounter during their time in the AD-BTT program and associated engagements. And that respect and care MUST BE provided at the highest professional standard.

**Competence:** Students shall practice under the supervision of an assigned professional and will not practice skills beyond their level and formal training. It is the student's responsibility to maintain and improve the necessary skills and knowledge at their professional practice level by actively participating in critical reflection, both individually and with their supervisor(s).

**Punctuality:** Punctuality is required for all theory classes and practical assessments, seminars, group meetings, small and large group collaborations, and all field-based experiences. Students must comply with all verbal and written deadlines when completing the assigned tasks.

**Consent for Patient/Donor Care:** Wherever possible, students shall ensure they receive informed consent from their patients/donors before performing their assigned tasks. That includes identifying themselves to the patients as students.

**Confidentiality:** Students MUST ensure the anonymity and confidentiality of any information they obtain during their work placements. They must not disclose such information to a third party unless there is a legal or professional duty.

# Student Performance Conduct

## **In-depth Knowledge and Understanding of Blood Transfusion Technology**

- ✓ Comprehensive and in-depth knowledge of Blood Transfusion Technology
- ✓ A broad understanding of the field of study with an analytical perspective on how other disciplines relate to Blood Transfusion-A link between Theory and Practice
- ✓ An understanding of technical, social and civic responsibility as a Blood Bank Technologist

## **Data Analysis and Critical Judgement-Quality Assurance in Blood Banking**

- ✓ The ability to collect, analyse and organise information and ideas and to convey those ideas clearly and fluently in written and spoken forms.
- ✓ The ability to evaluate expert opinions, make decisions and reflect critically on the justifications for decisions using an evidence-based approach
- ✓ The ability to formulate and investigate field-related problems, create solutions, innovate and improve current practices in blood banking

- ✓ The ability to generate ideas and adapt innovatively to changing work environment(s)

## **Effective Communication**

- ✓ The ability to use the appropriate style and means of communication to convey the information and recommendations/critique as part of an interdisciplinary team
- ✓ The ability to use different information and communication technologies to communicate technical, official and general ideas and information

## **Professional Skills in Blood Banking**

- ✓ The ability to apply critical reasoning to issues at hand through independent thought and informed judgment for authentic decisions
- ✓ The ability to process data/different materials related to the field and to critically analyse and integrate information from a wide range of sources
- ✓ The ability to work (Patient Care/Tasks in/of the related field, i.e. Blood Banking) effectively and sensitively or with professionalism and efficiency
- ✓ The ability to work and learn independently and effectively in a progressive career in Blood Banking



# GENERAL CODE OF CONDUCT

## Professional Appearance (Dress Code)

Students **must** wear clean, professional attire suitable for laboratory and clinical settings. This includes:

- ✓ **Uniform:** A clean lab coat with appropriate name tags.
- ✓ **Footwear:** Closed-toe shoes to comply with safety standards.
- ✓ **Personal Grooming:** Neat, conservative appearance with minimal accessories, no strong perfumes, and hair tied back in the lab.

## Punctuality and Attendance

- ✓ Students must be punctual and present for all classes, labs, and clinical rotations.
- ✓ Timely submission of assignments and adherence to deadlines are mandatory.

## Respect and Professional Interaction

- ✓ Demonstrate respect towards faculty, peers, patients, and clinical staff.
- ✓ Maintain professionalism in all interactions, using proper communication and behaviour.

## Confidentiality

- ✓ Uphold donor and patient confidentiality at all times in accordance with ethical and legal standards.

- ✓ Do not disclose patient information unless required for medical or academic purposes under supervision.

## Ethical Practice

- ✓ Act with integrity and honesty in all academic and clinical tasks, including course and lab work.
- ✓ Report errors or incidents immediately to supervisors to maintain blood donor and patient safety.

## Health and Safety

- ✓ Follow all safety protocols in the lab, including the proper handling of lab consumables, blood products and sharp instruments.
- ✓ Adhere to biosafety and infection control guidelines, such as using gloves and masks when appropriate.

## Consent for Patient Care

Obtain informed consent from patients or donors before conducting any blood transfusion-related procedures.

## Digital Literacy

Utilise digital tools effectively, including patient management software and laboratory information systems, while adhering to privacy regulations.

## Application Eligibility Criteria:

Candidates fulfilling the following criteria are eligible for the AD-BTT Entry Test.

- F.Sc./A-level from any of the following with a minimum of 45% marks from a recognised board:
  - Pre-Medical
  - Medical Technology
- No Age Limit

## Admission Process:

The admission process will include an Entry Test.

## Preparation of Merit List:

The merit list will be prepared based on the following Conditions:

- F.Sc./A-level Result - 50% Weightage
- Entry Test Result - 50% Weightage

## Scholarship Policy:

- Need-based Financial Assistance

## Admission Intake:

- Spring Semester (starts in March) – An Annual Induction

## Program Fee Structure

Application Processing Fee	2800 PKR (Pakistani Rupees)
Admission Fee	28,500 PKR
Security Deposit	10,000 PKR
Examination Fee (Per Semester)	15,000 PKR
*Tuition Fee (Per Semester)	60,000 PKR
At the Time of Admission	113,500 PKR

\*Can be paid in instalments



# Structural and Educational Provisions at AD-BTT

## Salient Features

- The First of Its Kind Degree in Blood Transfusion Technology-A Fastest-growing Field in Pakistan and Abroad
- Specialised English Language Learning System to prepare students for National and International Jobs in the Blood Banking Sector
- Progressive Degree to BS and MS for 45% and above HSC Scorers
- Age is NOT A Barrier. Working Lab Technicians interested in pursuing higher education are eligible if they meet the Admission Requirements (i.e. 45% HSC in Pre-medical/Medical Technology)
- Post-Degree \*Job Placement at Indus Hospital & Health Network (IHHN) Blood Centers

*\*subject to the vacancies in hand*

## Student Support

GUIDANCE COUNSELING to identify, counsel and facilitate students in:

- ✓ **Dealing** with their ***Educational Challenges*** to enhance their ***Academic Performance***
- ✓ **Coping** with their ***Emotional, Social and Intellectual Crises***
- ✓ **Managing Study-Work-Life Balance** and ***Social Well-being***

## Educational Facilities

- FCPS Haematology qualified physician, with another haematologist (FCPS/ MPhil Haematology)
- At least *four* MBBS-qualified lecturers, *training and quality assurance teams*, and *multiple MLT-qualified technologists*
- On-site Administrative and Management Teams
- Fully air-conditioned campuses
- CCTV Monitoring of the Teaching and Learning Routine
- Learning Management System (LMS) to enhance students' academic, research, and patient care-related knowledge and skills ON-CAMPUS as well as ONLINE
- Skill Training Laboratory in Blood Banking
- Smart Classroom
- Health Services

CAREER COUNSELING to provide *Guidance* and facilitate students in:

- ✓ **Selecting** different fields of study for their ***Higher Education***
- ✓ **Finding** Jobs in the ***National and International Blood Bank Services***
- ✓ **Developing Globally Competitive Job Skills** through MOOC (Massive Open Online Courses)

## Academic Supervision


At the start of each semester, students will be provided with clear goals and an action plan through guidebooks, module descriptors, and semester schedules. The arrangements for the academic supervision of the students include:

- Monitoring course attendance.
- Continuous assessments to monitor intended learning outcomes (marked and part of final semester results), arranged by the head office Department of Assessment and Evaluation (DAE).
- Multiple formative assessments in the form of quizzes (not marked or part of continuous assessment tests or final semester results) with proper post-activity feedback by the campus faculty.
- Supervised clinical practicums. Each student has a logbook that specifies learning activities. This logbook is verified by designated clinical supervisors.
- Student survey forms for course teachers and course management.
- Academic and Disciplinary Committee comprising Course Instructor, Semester In-charge and Assistant Professor.
- Arrangement of remedial sessions for defined underperformers.
- Academic counsellors regularly consult with students, including low-achieving students. Course Instructors are responsible for identifying students who require intensive academic counselling.



## Credit Hours for AD-BTT

- Theory: One Credit Hour for Theory Class translates into *One Contact Hour* per Week
- Practical (Lab & Clinical Practicum): One Credit Hour for a Practical Class translates into *Three Contact Hours* per Week

CONDUCT OF PROGRAM					
Year I					
Semester I		Summer Semester	Semester II		
18 weeks		09 weeks	18 weeks		
Compulsory Courses	Foundation Courses	Improvement/ Repetition of course	Compulsory Courses	Foundation Courses	Major Courses
03	03		03	01	02
08 credit hours	08 credit hours		07 credit hours	03 credit hours	05 credit hours
Total Credit Hours = 16			Total Credit Hours = 15		
					
Year II					
Semester III		Summer Semester	Semester IV		
18 weeks		09 weeks	18 weeks		
Compulsory Courses	Major Courses	Improvement/ Repetition of course	Compulsory Courses		Major Courses
03	03		03		04
08 credit hours	08 credit hours		06 credit hours		11 credit hours
Total Credit Hours = 16			Total Credit Hours = 17		
AWARD OF ASSOCIATE DEGREE IN BLOOD TRANSFUSION TECHNOLOGY					64



# Assessment and Examination System

The NUMS assessment and examination policy is based on the semester, as per HEC policy guidelines.

AD-BTT students will attempt three types of assessment throughout the program.

- 1) Formative Assessment (to assess and address the student's learning needs)
- 2) Continuous Assessment
  - i) Quizzes & Tests (contribute 15% to the final course grade)
  - ii) Presentations/Practical/OSCE/OSPE/Project (contribute 15% of the final course grade)
- 3) Examination
  - i) Midterm (contribute 25% to the final course grade)
  - ii) End-Semester Examinations (contribute 40 % to the final course grade)

## Course Grading System

The student's final assessment shall be done by Grade Point Average (GPA). NUMS shall use absolute grading on a scale of 4.00 points for the calculation of GPA. The minimum qualifying CGPA for AD-BTT shall be 2.00. For the convenience of reference, the following detailed percentage and letter grades for calculating GPA have been formulated in light of the relevant regulatory authorities' policies.

## CGPA Requirement for Completion of AD-BTT

For completion of the degree, the minimum qualifying CGPA for undergraduate and graduate programs is  $\geq 2.00$ .



## Contact Us

For information and queries, please email

adbtm.info@tih.org.pk

or

call us at 03018284369

Between 9:00 AM to 4:00 PM (Mon-Fri)

To apply, visit

<https://iuhs.edu.pk>



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