



DOW UNIVERSITY OF HEALTH SCIENCES

SCHOOL OF POSTGRADUATE STUDIES

PROGRAM SPECIFICATION - SESSION 2026-27

<p>Introduction of Institute & Program</p>	<p>Dr. Ishrat-ul-Ebad Khan Institute of Blood Diseases, Karachi, is part of a prestigious medical university, Dow University of Health Sciences (DUHS) it offers a variety of courses and CME, including one on the essential skills of blood bank serology. This program is designed for professionals dealing with transfusion practices. This training will provide hands-on experience and comprehensive understanding of the principles and practices involved in blood banking. Upon completion, post graduate students will be equipped with the knowledge and skills necessary to work in blood banks, hospitals, and other healthcare settings, contributing to the safe and efficient practices of blood transfusions. This program is also specifically designed for those professionals who already have good experience of blood banking and aim to pursue their career in transfusion medicine, with a recognized degree.</p>
<p>Course Title (As approved by PM&DC/HEC)</p>	<p>Master of Science Transfusion Medicine and Tissue Typing</p>
<p>Course Duration</p>	<p>2-4 years</p>
<p>Type of Study</p>	<p>Postgraduate clinical and academic training program in transfusion medicine.</p>
<p>Study System</p>	<p>Semester system</p>
<p>Total Credit Hours</p>	<p>30 hours</p>
<p>Credit Hours Distribution –Semester Wise</p>	<p>First semester: credit hours: 8 Second semester: credit hours: 13</p>



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	<p>Third semester: credit hours:4</p> <p>Fourth semester (Research project): credit hours: 5</p>
<p>Study Credit Hours Distribution – Topic Wise</p>	<p>Course Name, Course Code, Credit Hours</p> <p>Immunohematology; TM704; 5 hours</p> <p>Transfusion Practices; TP 705; 5 hours</p> <p>Clinical Transfusion; CT 706; 5 hours</p> <p>Biostatistics and Research Methodology; BMS 706; 3 hours</p> <p>Project Management; PM711; 3 hours</p> <p>Comprehensive Tissue Typing, Biosafety & Patient-Centered Practices; TT712; 4 hours</p> <p>Research paper, Lab and Clinical wards; RLC-701; 5 hours</p>
<p>Teaching Hours Distribution</p>	<p>Course Title:</p> <p>Immunohematology (TM704)</p> <p>Unit 1: Basics of Blood Banking and Immunohematology. Teaching hours: 9 hours</p> <p>Unit 2: Blood donor selection process and blood donor testing. Teaching hours: 7 hours</p> <p>Unit 3: Quality Control in Blood Banking. Teaching hours:12 hours</p> <p>Biostatistics and Research Methodology (BMS 706)</p> <p>UNIT 1: Introduction to Biostatistics Teaching hours:16 hours</p>



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SEMESTER 02

Transfusion Practices (TP 705)

Unit 1: General Principles of Blood Banking and Component Preparation. Teaching hours: 6 hours

Unit 2: Advances in Transfusion Medicine. Teaching hours: 13 hours

Unit 3: Transfusion Transmitted Infections (TTI)
Teaching hours: 6 hours

Clinical Transfusion (CT 706)

UNIT 1: Clinical Indications of Blood Component Therapy. Teaching hours: 6 hours

UNIT 2: Transfusion component therapy in Special Cases. Teaching hours: 5 hours

Project Management (PM711)

UNIT 1 Management of Blood Bank & Blood Centre. Teaching hours: 14 hours

Comprehensive Typing, Biosafety & Patient-Centered Practices (TT712)

Unit1: Biosafety, Facility and Engineering controls. Teaching hours: 8 hours

Unit 2: Medical diseases associated with Transfusion Science. Teaching hours: 11 hours

Unit 3: Apheresis and Tissue Banking in Transfusion Medicine. Teaching hours: 10 hours

Unit 4: Patient Blood Management and



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	Hemovigilance. Teaching hours: 9 hours
Modules Detail with Credit Hours	<p>(a) Immunohematology (5 credit hours)</p> <p>b) Biostatistics and Research Methodology (3 credit hours)</p> <p>c) Transfusion Practices (5 credit hours)</p> <p>d) Clinical Transfusion (5 credit hours)</p> <p>e) Project Management (3 credit hours)</p> <p>f) Comprehensive Tissue Typing, Biosafety & Patient-Centered Practices (4 credit hours)</p> <p>Research paper, Lab and Clinical wards (5 credit hours).</p>
Assessment of Student	<p>Midterm & Exit Examination: Best Choice Questions and Short Answer Questions and Practical based (OSPE)</p> <p>Semester Examination: Best Choice Questions, Short Answer Questions and Practical based (OSPE)</p>
Teaching Institution	Dr. Ishrat-ul-Ebad Khan Institute of Blood Diseases.
Degree Awarding Institution	Dow University of Health Sciences, Karachi.