



NED University of Engineering and Technology
Department of Biomedical Engineering
Master's Thesis
Student List



Spring 2025

Name of Student	Roll No.	Title	Supervisor & Co-supervisor
Ms. Laiba Sameen	BM-001/2024	EEG Connectivity Dynamics Pain and Cognitive Stimuli Under Electrical Stimulation	Dr. Muhammad Danish Mujib Assistant Professor Department of Biomedical Engg., NEDUET Dr. Muhammad Abul Hasan Associate Professor Department of Biomedical Engg., NEDUET
Mr. Nasir Mehmood	BM-002/2024	EEG-Based Analysis of Pain Cognition Using Sloreta and Neuromodulatory Interventions with Tdcs and TENS	Dr. Muhammad Danish Mujib Assistant Professor Department of Biomedical Engg., NEDUET Dr. Muhammad Abul Hasan Associate Professor Department of Biomedical Engg., NEDUET
Ms. Umm E Hajra	BM-002 / 2024	Bioactive Graphene Hydroxyapatite Composite Coating on 316L SS Implant for optimizing its Corrosion Stability	Dr. Syed Faraz Jawed Assistant Professor Department of Biomedical Engg., NEDUET Engr. Dr. Eraj Humayun Mirza / Associate Professor Department of Biomedical Engg., NEDUET Dr. Muddassir Ali Memon Assistant Professor, MUET
Ms. Aasma	BM-001 /2024-25	Design Optimization and Finite Element Analysis of Breast Tissue Scaffolds for Enhanced Regeneration	Dr. Syed Faraz Jawed Assistant Professor Department of Biomedical Engg., NEDUET I Engr. Dr. Eraj Humayun Mirza Associate Professor Department of Biomedical Engg., NEDUET
Ms. Aumaiya Fatima Khatri	BM-003/ 2024-25	Zinc oxide-Hydroxyapatite Nanoparticles	Dr. Syed Faraz Jawed Assistant Professor Department of Biomedical Engg., NEDUET

		Coating on 316L Stainless Steel for Biomedical Applications	Dr. Eraj Humayun Mirza/ Associate Professor Department of Biomedical Engg., NEDUET Dr. Muddassir Ali Memon
Mr. Rabel Akram Keerio	BM-013/2024-25	Cognitive Task-Driven EEG Variations Following Neuromodulation	Dr. Muhammad Abu! Hasan Associate Professor Department of Biomedical Engg., NEDUET Dr. Muhammad Danish Mujib Assistant Professor Department of Biomedical Engg., NEDUET
Syeda Muneeba Bukhari	BM-016/2024-25	Binaural Beats for the Betterment of Social Interaction in Intellectual Disability	Dr. Muhammad Abu! Hasan Associate Professor Department of Biomedical Engg., NEDUET Prof. Dr. Saad Ahmed Qazi / Dean (ECE) Dr. Muhammad Danish Mujib Assistant Professor Department of Biomedical Engg., NEDUET
Ms. Fariha Shabbir	BM-006/2024-25	AI-Based Prediction of the Mechanical Properties of Beta-Type Titanium Alloys for Biomedical Applications	Dr. Syed Faraz Jawed Assistant Professor Department of Biomedical Engg., NEDUET Engr. Muhammad Shaheer Mirza
Ms. Paras Shaikh	BM-012/ 2024-25	Investigating the Effect of Neurofeedback for enhancing Cognitive skills in ADHD individuals	Dr. Muhammad Abu! Hasan Associate Professor Department of Biomedical Engg., NEDUET Prof. Dr. Saad Ahmed Qazi / Dean (ECE) Engr. Muhammad Hafeez Ur Rehman
Khadija Samad Khan	BM-017 /2024-25	Enhanced orthopedic implants: electrophoretic deposition of hydroxyapatite nanocomposites on titanium substrate	Engr. Dr. Eraj Humayun Mirza Associate Professor Department of Biomedical Engg., NEDUET Engr. Nafia Jawaid Kurd Department of Biomedical Engg., NEDUET

Fall 2024

Name of Student	Roll No.	Title	Supervisor & Co-supervisor
Ms. Moattar	BM-03/2023	Herbal bioinspired electrospun membrane fabrication: A potential skin tissue healing application	Dr. Madeeha Sadia Assistant Professor Department of Biomedical Engg., NEDUET Dr. Rabia Almas Arain Ms. Fizza Zia Shaikh
Ms. Tehreem Shakeel	BM-015/2023-24	Effect of molecular weight on Hyaluronic Acid Serum for Cosmetic Application	Dr. Syed Faraz Jawed Assistant Professor Department of Biomedical Engg., NEDUET
Ms. Sijil Zehra	BM-013/2023-24	Combined Effect of Central and Peripheral Stimulation in Cognitive Enhancement and Pain Management	Dr Muhammad Danish Mujib Assistant Professor Department of Biomedical Engg., NEDUET Dr Muhammad Abul Hasan Associate Professor Department of Biomedical Engg., NEDUET
Mr. Haris	BM-006/2023-24	Synthesis and Characterization of Hybrid Cellulose Acetate/Zein Nano fibrous Scaffold loaded with Medicinal Plant Extract for ' Diabetic Foot ulcer	Dr. Syed Faraz Jawed Assistant Professor Department of Biomedical Engg., NEDUET Dr. Abdul Qadir Ansari Chairperson & Associate Professor Mehran University
Ms. Amna Shaikh	BM-01/2023-24	Machine Learning for Intention Detection Using Seated Movement Kinematics.	Dr. Ahmed Zahid Rao Assistant Professor Department of Biomedical Engg., NEDUET Dr. Muhammad Abul Hasan Associate Professor Department of Biomedical Engg., NEDUET
Ms. Warda Waseem	BM-016/2023-24	Cricket Player Performance Evaluation Using Kinematic and Kinetic Analyses	Dr. Ahmed Zahid Rao Assistant Professor Department of Biomedical Engg., NEDUET Dr. Muhammad Abul Hasan Department of Biomedical Engg., NEDUET
Mr. Muhammad Ansub	BM-010/2023-24	Assessing the Impact of Cycling on Tendon Properties: A Study Using Finite Element Modeling and Ultrasound Texture Analysis	Dr. Engr. Eraj Humayun Mirza Associate Professor Department of Biomedical Engg., NEDUET Engr. Ravish Javed (Researcher, College of Applied Medical

			Sciences, King Saud University, Riyadh Saudi Arabia)
Ms. Madiha Qureshi	BM-008/2023-24	Evaluating Tendon Strain Through Texture Analysis: Insights from MAZDA and Machine Learning Approaches	Dr. Engr. Eraj Humayun Mirza Associate Professor Department of Biomedical Engg., NEDUET Engr. Ravish Javed (Researcher, College of Applied Medical Sciences, King Saud University, Riyadh, Saudi Arabia)
Syeda Sehar Hussain	BM-014/2023-24	Graph Signal Processing Techniques for EEG Based Biomarker Identification in Neurodegenerative Disorders	Dr. Muhammad Danish Mujib Assistant Professor Department of Biomedical Engg., NEDUET Dr. Muhammad Abul Hasan Associate Professor Department of Biomedical Engg., NEDUET Dr. Fei He (Coventry University)

Spring 2024

Name of Student	Roll No.	Title	Supervisor & Co-supervisor
Ms. Wardah Siddiqui	BM -017 /2023	Temporal Characterization of ERP Components P300 and LPP in SUD Patients	Dr. Muhammad Abul Hasan Associate Professor Department of Biomedical Engineering Prof. Dr.Saad Ahmed Qazi Dean (ECE)
Ms. Bisma Naeem	BM-003/2023-24	Deep Structure Frequency Analysis of EEG in Individuals with Substance Use Disorder	Dr. Muhammad Abul Hasan Associate Professor Department of Biomedical Engineering Dr. Muhammad Danish Mujib Assistant Professor Department of Biomedical Engineering
Ms. Samra Junaid	BM-011/2023-24	Insilico Investigation of Functionalization on the Encapsulation of Charbazochrome Drug in SingleWalled Carbon Nanotubes	Dr. Syed Faraz Jawed Assistant Professor Department of Biomedical Engineering Engr. Syed Hassan Sarwar
Ms. Manahil Mustafa Khan	BM-009/2023-24	Spectral Analysis of Alpha and Beta Activity Changes in Individuals with Cannabis Use Disorder	Dr. Muhammad Abul Hasan Associate Professor Department of Biomedical Engineering Dr. Ahmed Zahid Rao Assistant Professor

			Department of Biomedical Engineering
Ms. Rozeena	BM-018/2023-24	Next-Generation Biomaterial Cartilage Regeneration gelatin/PDA/HA hydrogel scaffold	Dr. Engr. Eraj Humayun Mirza Chairperson / Associate Professor Department of Biomedical Engineering Dr. Syed Faraz Jawed Assistant Professor Department of Biomedical Engineering
Ms. Fareha	BM-004 / 2023-24	Understanding the Perspectives of Stakeholders to Integrating Mobility Assistive Technology into Care for Physically Disabled Individuals	Dr. Ahmed Zahid Rao Assistant Professor Department of Biomedical Engineering Dr. Muhammad Abul Hasan Associate Professor Department of Biomedical Engineering