

Department of Chemical Engineering
M.Tech Project 2025 – 2026

Sl. No.	Title of the Project (B.Tech)	Name of Project Guide	Allocated Student
1	Design and performance studies of Discrete Regenerative Fuel Cell (DRFC) system for long-term energy storage in applications like spacecraft and lunar missions, as well as for creating closed-loop energy systems that recycle water.	Dr. Biswajit Mandal	Mitashree Sinha
2	Thermodynamic Analysis and Process Evaluation of Direct Air Capture of Carbon Dioxide.	Dr. Ujjal Ghosh	Sk. Sultan Ahmed
3	Computational DFT calculation of Sulfur vacancy involved SnS ₂ catalyst for CCUS application.	Dr Sibsanakar Rahut Co-Guide: Dr. Lipika Das	Moulina Maiti
4	Production of Bioplastic from Water Hyacinth	Dr. Siddhartha Sankar Boxi	Amrita Chakraborty
5	Techno-economic optimization of a PSA system for onsite nitrogen generation	Dr. Sourav Poddar Co-Guide: Dr. Anoar Ali Khan, Dr. Ankita Majumdar, Dr. Suman Saha	Amit Das
6	Development of Gelatin based conducting Hydrogels for Bio-Sensors.	Dr. Sunil Baran Kuila	Aniket Roy
7	Smart Breather Valve Development Using IoT-Based Monitoring for Storage Vessel Safety	Dr. Asit Kumar Saha	Bapi Singh

Department of Chemical Engineering
M.Tech Project 2024 – 2025

Sl. No.	Project Supervisor	Project Title	Allotted Student
1	Dr. Sourav Poddar	Quality Assurance of a Beverage Industry leading to Industry 4.0 & 5.0	Supreeti Manna
2	Dr. Rabindranath Jana	Development of Fire Extinguishing Media	Arnab Patra
3	Dr. S. J Sahu	Studies on recycling of used engine oil to save the environment	Avik Chatterjee

Department of Chemical Engineering
M.Tech Project 2023 – 2024

Sl. No.	Project Title	Name of Guide	Allotted Students
1	Sustainable valorisation of vegetable and fruit wastes towards high-added value products recovery: experimentation and theoretical analysis	Dr. Suman Saha	Anjana Ghosh
2	Some studies on the handling and transfer of cryogenic liquids with reference to liquid propane and liquid butane	Dr. Asit Kumar Saha	Subhojit Saha
3	Mitigation of Air Pollution using different methods	Dr. Rabindranath Jana	Sujata Mandal
4	Development of novel filled polymeric IPN Conducting Hydrogels	Dr. Sunil Baran Kuila	Riya Bhaduri
5	Application of Agricultural wastes for production of SiO ₂ : Waste to Wealth	Dr. Radha Das	Titli Samanta
6	Design and Development of Efficient Portable Biodigester	Dr. Barnali Bej Co-Guide : Dr. Biswajit Mandal	Sumit Dutta
7	Studies on the morphology and performance of electrocatalysts and proton exchange membrane for fuel cell	Dr. Biswajit Mandal Co-Guide : Dr. S.B.Kuila	Pallavi Das

Department of Chemical Engineering
M.Tech Project 2022 – 2023

Sl. No.	Project Title	Name of Guide	Allotted Students
1	Development of Novel Polymeric Hydrogels for Adsorptive Separation	Dr. S.B. Kuila	Md. Afridi Ahmed
2	Synthesis of Cashew nut Shell oil by extraction, cold pressing or super critical extraction	Dr. S.J. Sahu	Susovan Ghosh

Department of Chemical Engineering
M.Tech Project 2021 – 2022

Sl. No.	Project Title	Name of Guide	Allotted Students
1	Synthesis and characterization of novel nano filled polymeric IPN membrane for proton-exchange membrane fuel cells (PEMFC)	Dr. B. Mandal, Co-Guide : Dr. S.B. Kuila	Ramprasad Mondal
2	Development of Novel Polymeric filled IPN membranes for Pervaporative Separations	Dr. S.B. Kuila, Co-Guide : Dr. B. Mandal	Susmita Maity
3	Extraction of Copper from Printed Circuit Board (PCB) by Acid Leaching	Dr. S.S. Boxi	Krishnendu Dolai
4	Development of Nanocomposite Membrane for Separation of Liquid Mixtures	Dr. R.N. Jana Co-Guide : Ms. A. Sinha	Dipkinkar Maity

Department of Chemical Engineering
M.Tech Project 2020 - 2021

Sl. No.	Project Title	Name of Guide	Allotted Students
1	Development of Nanocomposite Membrane for Separation of Liquid Mixtures	Dr. R. N. Jana, Co-Guide : Ms. A. Sinha	Sanjib Kumar Jana
2	To Study the effect of Nona-FeS as catalyst for removal of Carcinogenic Cr (VI) from industrial wastes in Photo Oxidation Process	Dr. R. Das	Binayak Pal
3	Studies on Extraction bioactive compounds from herbal resources	Dr. Sutapa Roy	Esha Chowdhury
4	Studies on the flow behaviour of multiphase fluid through conduit	Dr. S.J. Sahu, Co-Guide : Dr. T.K. Manna	J.K. Pattanayak
5	Studies on electro-catalysts and solid ionic membrane for electro-chemical devices	Dr. B. Mandal	Dibakar Roy
6	Solar hydrogen production using magnetolysis of water	Dr. B. Mandal	Anup Sasmal
7	Air separation using VSA System	Dr. A.K. Saha, Co-Guide : Mrs S. Samanta	Sukhen Das