

Northern Technical University

Technical Engineering College / Mosul

Power Mechanics Engineering Technologies Department



Graduation Projects / Renewable Energy Branch for the Academic Year 2025–2026

No.	Project Title	Department	Supervisor	Students	Study Type	Sustainable Development Goals Served by the Project
1	Design And Fabrication of Vertical Axis Wind Turbine	Power Mechanics Engineering Techniques / Renewable Energy Branch	Asst. Prof. Firas Aziz Ali	1. Taha Harith 2. Osama Jasim 3. Iman Saad Ali 4. Shams Muthanna	Morning	7,9,13
2	Investigating Water and Heat-Sink Cooling Systems Experimentally To Improve Solar Cell Performance	Power Mechanics Engineering Techniques / Renewable Energy Branch	Asst. Prof. Ahmed Mustafa Salim	1. Younis Khalaf 2. Haider Nashwan 3. Raikan Mohammed 4. Muntazar Fawad	Morning	7,9,13
3	Manufacturing Of Two Face Flat Plate Solar Thermal Collector	Power Mechanics Engineering Techniques / Renewable Energy Branch	Dr. Omar Abdulhadi Mustafa	1. Mustafa Omar 2. Ahmed Riyadh 3. Abdullah Yasser 4. Hider Ahmed	Morning	13,7,9,12
4	Electric Power Generation Using Hydrogen Gas Produced by Solar Energy	Power Mechanics Engineering Techniques / Renewable Energy Branch	Asst. Lect. Omar Saadoon Khalil	1. Aatika Ali 2. Fatima Rasheed 3. Mohammed Rasmi 4. Abdul Malik Juma	Morning	13,7,9,12
5	Effect Of Phase-Change Materials in the Performance of a Double-Pass Solar Air Heater- A Case Study in Mosul-Iraq	Power Mechanics Engineering Techniques / Renewable Energy Branch	Dr. Mohammed Ra'ad Abdulwahab	1. Sajad Ghazi 2. Mahmoud Younis 3. Zaidoun Qasim	Morning	7,9,12,13

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Graduation Projects / Air Conditioning and Refrigeration Branch for the Academic Year 2025–2026

No.	Project Title	Department	Supervisor	Students	Study Type	Sustainable Development Goals Served by the Project
1	An Experimental Investigation of a Lauric Acid and Water Hybrid Solar Heat Storage Wall (Trombe Wall): As a Case Study of Mosul	Power Mechanics Engineering Techniques / Air Conditioning and Refrigeration Branch	Asst. Prof. Ahmed Mustafa Salim	1. Mahmoud Farqad 2. Younis Rafiq	Morning	7,9,12,13
2	Manufacture and operation of a steam boiler	Power Mechanics Engineering Techniques / Air Conditioning and Refrigeration Branch	Asst. Prof. Qais Abd Yousif	1. Abdulrahman Taha 2. Othman Yousif 3. Omar Ali 4. Ubaida Faris	Morning	7,8,9,12,13
3	Household refrigerator performance enhancement using PCM as a buffer Thermal Energy Storage System: A case study in Mosul, Iraq	Power Mechanics Engineering Techniques / Air Conditioning and Refrigeration Branch	Dr. Mohammed Ra'ad Abdulwahab	1. Yasser Raed 2. Yousif Ahmed 3. Omar Waad 4. Huda Mohammed	Morning	7,9,11,12,13
4	Performance Enhancement of Air Conditioning Systems Using Heat Pipe Heat Exchangers	Power Mechanics Engineering Techniques / Air Conditioning and Refrigeration Branch	Asst. Lect. Ahmed Hani Ghanim	1. Mohammed Shamil 2. Anas Omar 3. Dua Abdullah 4. Zainab Munhil	Morning	7,9,11,12,13
5	Construct a Solar water Double Pipe Heater Using a Parabolic Trough	Power Mechanics Engineering Techniques / Air Conditioning and Refrigeration Branch	Dr. Omar Abdulhadi Mustafa	1. Ibrahim Faris 2. Hisham Adeeb 3. Abdullah A. Habash 4. Ali Hameed 5. Mustafa Yaqzan	Morning	7,9,11,12,13

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Graduation Projects / Production and Automation Branch for the Academic Year 2025–2026

No.	Project Title	Department	Supervisor	Students	Study Type	Sustainable Development Goals Served by the Project
1	Design And Implementation of an Automated Screw Conveyor for Granular Material Handling	Power Mechanics Techniques / Production and Automation Branch	Asst. Prof. Thamer Awn Al-Din	1. Fares Saeb 2. Muhannad A. Ahmed 3. Waleed Khalid 4. Abdul-Munim Ali	Evening	8,9,12
2	Improving Productivity and Reducing Waste in A Small-Scale Production Line Using Lean Manufacturing Techniques	Power Mechanics Techniques / Production and Automation Branch	Asst. Prof. Thamer Awn Al-Din	1. Ammar Khuder 2. Mohammed Abdullah 3. Haidran Mohammed 4. Mahmoud Ali	Evening	8,9,12
3	Design And Manufacturing of Multi Degree of Freedom Robotic Arm	Power Mechanics Techniques / Production and Automation Branch	Dr. Ayman Sabah Rashad	1. Sultan Khalil 2. Ahmed Abd Mustafa 3. Abdullah Basel 4. Amer Mohammed 5. Abdulrahman Fathi	Evening	8,9
4	Traditional And Non-Traditional Cutting Processes: A Comparative Study	Power Mechanics Techniques / Production and Automation Branch	Prof. Hussein Mohammed Ali	1. Laith Talal 2. Amer M. Thannon 3. Abdulqader M. Khalif	Evening	8,9,12
5	Manufacture Of Plastic Recycling Device for Making Particles	Power Mechanics Techniques / Production and Automation Branch	Dr. Yasser Hassan Ali	1. Imad Hamdi 2. Mohammed Ghaib 3. Omar Abawi 4. Mahmoud Durgam 5. Zaid Ammar	Evening	8,9,12

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No.	Project Title	Department	Supervisor	Students	Study Type	Sustainable Development Goals Served by the Project
6	Design And Manufacturing a Friction Coefficient Meter Apparatus	Power Mechanics Techniques / Production and Automation Branch	Asst. Prof. Tarek Khalid Abdulrazzaq	1. Munther Salem 2. Othman Saad 3. Mohammed Khalid 4. Sarah Omar	Evening	8,9,12