

Heaven's Light is Our Guide  
**Rajshahi University of Engineering & Technology**  
**Department of Mechatronics Engineering**  
**Session: 2013-2014**

**Thesis Title**

<b>Sl. No.</b>	<b>Thesis Title</b>	<b>Student Roll</b>
01	Fractional Order Robust PID Controller Design for Voltage Control of Islanded Microgrid	138009 138020
02	Design and Development of Vehicle Mounted Wind Turbine Generation System	138010 108023
03	Design and Development of Autonomous Aerial Vehicle	138005 138018
04	Stability Analysis for Interconnected Nonlinear System With 'Mixed' Negative - Imaginary	138008
05	Improved Vision in Inclement Weather for Self-Driving Cars Using CNN	138013 138015 138026
06	An Artificial Neural Network Based Approach to the Estimation of Transmission Line Fault Location	138014 138022
07	Design and Development of WSN-IOT Framework for Home Automation	138011 138024
08	Design and Development of Gesture and Smart Phone Controller Wheel Chair for Disabled	138001 138016
09	Deep Neural Network Based Image Recognition	138017 138019
10	An Improved Design of Surface Plasmon Resonance Biosensor Based on Graphene with TiO <sub>2</sub> and Gold Nanoparticle for Immune Sensing	138006 138029
11	Robust Integral Linear Quadratic Gaussian Controller Design for Nonlinear Single Machine Infinite Bus Power System	138012
12	Convolutional Neural Network Based Paddy Plant Disease Recognition	138003 138027

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**Session: 2014-2015**

**Thesis Title**

<b>Sl. No.</b>	<b>Thesis Title</b>	<b>Student Roll</b>
01	Design and Development of an Advanced Biometric Automated Teller Machine for Secured e-Banking System in Bangladesh	148021 148029
02	Environment Condition Monitoring and Long-Distance Actuator Control Using Wireless Sensor Network (WSN)	148004 148007
03	Smart Automated Home for Disable People Using PLC	148001 148015
04	Development of Real-Time Vehicle Occupancy Tracking System in a Parking Lot Using Deep Learning	148022 148030
05	Robust Fuzzy Logic Controller for Power, Voltage and Frequency Control of Multi Level Distributed Generation Based Three-Phase Island Microgrid	148017
06	Design of a Novel Blended State Estimated Adaptive Controller for Voltage and Current Control of Microgrid against Unknown Noise	148013 148018
07	Controlling the Movement of a Sel-Driving Vehicle by Hand Gesture Using Leap Motion Controller	148016 148025
08	Modeling and Development of 3 DoF Color Sorting Robotic Manipulator Using Arduino	148011 148020
09	Analyzing Text to Develop Interactive Conversation Agent Using NMT and Sentiment Analysis Using Multi-Channel Combination of CNN and LSTM	148005 148027
10	Design and Development of a Magnetic Levitation System Using Zero Power Control	148023 148025 148026
11	Plant Detection Based on Leaf Recognition Using Multi Level residual Network and Progressive Neural Architecture Search	148024
12	Convolutional Neural Network Based Person Specific Face Recognition & Detection	148019 148028
13	Development of a Servo Based Mouse Controlled Robotic Wrist	148006 148012
14	Optimum Design and Prototyping of Small Wind Turbine Blade to Extract Maximum Wind Energy with Automatic Wind Flow Detection	148002 148003
15	Voice Controlled Multi-Functional Home Automation System	148014 138030

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**Session: 2015-2016**

**Thesis Title**

<b>Sl. No.</b>	<b>Thesis Title</b>	<b>Student Roll</b>
01	Data Driven Model Predictive Control Design to enhance Tracking Accuracy and Power Quality of a Solar Based Microgrid under Uncertain Loads	1508003 1508010
02	Controlling a Prosthetic hand using EMG Signal	1508026 1508030
03	Performance Improvement of Domestic Refrigerator Through Suction Line Heat Exchanger Design	1508019 1508020
04	Design and Development of a Robotic Arm for Classifying Tomato Leaf Diseases & Spraying Pesticides on Affected Leaf	1508002 1508015
05	A Novel Approach to Extractive Question Answering Chatbot in Bangla Using Bidirectional Encoder Presentation from Transformer	1508007 1508012
06	Smart Agriculture Monitoring and Control Using Internet of Things (IOT) in Greenhouse	1508025 148010
07	Deep Learning-Based Condition Monitoring & fault Diagnosis of a Motor Gear Test Rig	1508004 1508016
08	Optimum Design and Performance Evaluation of a Solar Panel with Automatic Sun Tracking System	1508022 1508028
09	Speed Bump & Pothole detection with Single Shot Multibox Detector Algorithm & Spped Control for Autonomous Vehicle	1508013 1508017
10	Image Processing and Convolutional Neural Network based Approach for Detecting Lane and Objects of an Autonomous Car	1508014 1508027
11	Computer Vision Based Translator for Bangla Sign Language Characters	1508006 1508008
12	Machine Vision Based Eye Gaze Controlled Virtual Keyboard for People with Neuromotor Impairments	1508011 1508018
13	Design and Development of PLC Based Training Modules for the Department of Mechatronics Engineering of RUET	1508024 138004
14	Optimum Blade Design of Pinwheel Type Horizontal Axis Wind Turbine for Low Wind Speed Areas	1508023 1508029