



LIST OF GRADUATE THESES
as of October 2020
Master of Science in Electrical Engineering

Abad, M. R. (2019). *Modelling a reliability-based comprehensive asset maintenance program for distribution system using multi-variable prioritization* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.

Alipour, A. (2016). *Optimal Coordination of Directional Overcurrent Relays (DOCR) in a Ring Distribution Network with Distribution Generation (DG) using Genetic Algorithm* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Alireza, M. (2017). *Voltage Control of a Grid width Distributed Generation (DG) Using Fuzzy Logic & Artificial Neural Network (ANN)* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.

Alvarez, J. D. D. (2015). *Bonding Efficiency of Palladium-Coated Copper Wire for Ball-Wedge Thermosonic Wire Bonding of Aluminium Bond Pad and Copper Lead Frame in Inert and Ambient Gas Environmental* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Amado, T. M. (2015). *Wireless Flood Monitoring Using Integrated Hydrological Sensors and Flood Prediction via Artificial Neural Network* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Angac, W. L. (2016). *Development of an Effective Temperature Control For Artificial Fowl Egg Incubator*. [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Ani, D. T. (2016). *Integration of Contract for Difference in the Minimization of Energy Cost of a Distribution Utility Using Linear Programming* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Aquino, P. D. P. (2014). *Design experiments for short transmission lines for power system laboratory* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Ariola, G. M. (2009). *Design of a self-checking odd parity generator using polymorphic gates* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Avendaño, S. B. (2017). *Microcontroller-Based Hardware Interface and Identification of Corn Plant Leaf Disease through Image Processing using Support Vector Machine* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.

Barles, J. B. (2015). *Noise Analysis and Performance Characterization of Correlated Double Sampling (CDS) Based Measurement System for Biosensor* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

- Baronia, O. E. T. (2013). *Economic Evaluation of Congestion Relief with Market Auctions Based on Power Market Simulations* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Bautista, C. C. (2019). *Energy profiling and residential load shifting mechanism with cost reduction using genetic algorithm* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.
- Bernardo, M. (2014). *Validation of full-custom IC design flow using polymorphic gate in TIP-CAD environment* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Bigay, A. C. (2016). *Supply Portfolio Optimization Using Linear Programming and Unit Commitment* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Buenafe, N. B. B. (2011). *Load forecasting approach by integration of Support Vector Machine (SVM) forecasting technique with reduced attributes using Evolutionary Algorithm (EA)* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Cabuang, R. C. (2013). *Strategic Distribution Asset Management with the Implementation of Performance Incentive Scheme on Electric System Reliability in the Manila Electric Company* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Carpio, J. N. (2015). *An Earthquake-Activated Power Interrupting Device Using Tri-axis Accelerometer* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Carullo, P. C. (2004). *Electrical design of the emergency power system of the Ospital ng Makati* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Chan, S. A. (2001). *Transient stability study of Petrocorp's power system using the EDSA power system analysis software* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Consigo, H. J. M. (2015). *Gallium Arsenide (GaAs) integrated Circuits Decapsulation Technique Using Mixed Acid Chemistry for Die-Level Failure Analysis* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Cordero, C. J. (2017). *Biompedance Measurement in Quantifying Blood Glucose Level using Vector Network Analyzer S11 Parameter and SAS JMP Tool* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.
- Cruz, J. P. M. (2009). *System modeling and performance evaluation of genetic algorithm using neural networks* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Cudia, F. V. (2011). *Design of an electronic load controller for induction generator application* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

De Castro, M. J. B. (2014). *Scheduling of multiple shaft combined cycle plant in co-optimized energy and reserve market using mixed integer programming* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

De Guzman, W. A. (2015). *Power-Gated On-Off Keying Transmitter in 0.35, 0.25 and 0.18 microns CMOS for Biomedical Applications* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

De Leon, V. B. (2010). *MCU based aquaculture system* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Dela Cruz, K. G. M. (2018). *Optimal Distributed Series Reactor (DSR) control algorithm with generation and load curtailment for security constrained operational of power system* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.

Desear, A. R. (2004). *Effectiveness of selected models of automatic voltage regulators used in the computer laboratories of Mapua Institute of Technology* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Diaz, M. J. P. (2015). *Genetic Algorithm Based Dead Reckoning and Remonte Positioning System with Integral Kalman Filter for 3D Space Mapping* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Du, A. T. (2002). *Design of a diesel aided PV-wind electric generating system* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Duran, J. (2015). *Design of an 8-Bit R-2R Ladder Current-Mode Digital to Analog Converter with Posicast-Based Glitch Reduction using 0.18um Process* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Escoto, B. E. (2018). *Thermoelectric Generation System with Maximum Power Point Tracking Algorithm* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.

Espenida, A. E. (2016). *Design and Implementation of Hybrid Pico Hydropower Generator - Solar Photovoltaic System* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Espiritu, J. L. A. (2019). *Reliability Evaluation of 69 kV Transmission Line System on Weather-Related Failures through Sequential Monte Carlo Simulation Supported by Markov Method* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.

Evangelista, A. M. (2016). *A Process and Temperature-Tolerant Power On Reset (POR) With a Flexible Detection Threshold and Hysteresis* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Ghorbaniparvar, M. (2012). *Portfolio Optimization Applied for Wholesale Electricity Spot Market (WESM) Based on Markowitz Theory* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Gonzales, A. N. (2018). *Temperature Controlled Rice Hull Charcoal Machine for Household Consumption* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.

Kazemi, M. (2012). *A probabilistic unit commitment for autonomous grid incorporating wind and solar power plants* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Lauresta, I. M. (2015). *Renewable Energy From River Using Hydrokinetic Device* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Leuterio, D. R. E. (2016). *Stability Risk Assessment of Luzon Grid Generation Expansion using Power System Simulation for Engineers Software* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Llamzon, H. C. (2018). *Portfolio optimization of the Peninsula Electric Cooperative, Inc. (PENELCO) using generalized reduced gradient (GRG) non-linear programming* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.

Lluisma III, L. L. E. (2014). *Distribution Impact Study (DIS) for Net-Metering with photovoltaic renewable energy resources using SynerGEE* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Lucero, V. D. G. (2005). *A proposed upgrade of automatic transfer switch for standard emergency power system at Mapua Institute of Technology* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Lunasin, J. A. D. (2008). *Internal model control with optimal proportional integral tuning for region of instability compensation* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Mallari, G. C. (2002). *A comparative study between semiconductor diodes with non-solder flow and with solder flow in the lead wire assembly* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Marcelino, K. M. C. (2011). *Optimal sizing and siting of distributed generation using genetic algorithm* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Mariano, M. V. G. (2014). *Photovoltaic power booster utilizing Seebeck Effect in motor pump application* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Mendoza, J. J. B. (2010). *PC Software-Based pH level control using Wireless Wide Area Network Transmission* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Milla, S. G. III. (2000). *A study on circuit tripping without relay target* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Mitante, Ma. I. C. (2020). *Hydro Energy Research Assessment of Selected Sites in Marinduque* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.

Montealegre, A. G. M. (2019). *Fish aggregating lighting system for stationary lift nets in Cavite City coast using colored submersible lights and fish finder device* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.

Nuevo, L. M. B. (2012). *Development of generation maintenance scheduling system using modified discrete particle swarm optimization* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Oldan, B. R. M. (2013). *Generator Maintenance Scheduling optimization for Power System Grid thru Computer Based task Simulation using Genetic Algorithm* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Olmedo, E. I. (2011). *Forecasting market prices in the Philippines wholesale electricity spot market* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Panganiban, M. Q. G. (2009). *Thermal properties and moisture absorption of halloysite nanotubes (HNTs) on Epoxy Molding Compound (EMC)* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Pelaez, J. R. (2001). *Electric consumption reduction by using Savic-net EV automation system.* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Perlado, R. C. (2005). *A proposed reliable temporary back-up power for the Mapua Institute of Technology Intramuros campus using uninterruptible power supply (UPS)* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Placente, J. C. (2009). *Power systems short term demand forecasting using SHAP analysis* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Pula, R. A. (2017). *Determination of Calcium and pH Level in Urine for Calcium Based Kidney Stone Diagnosis Using Arduino Microcontroller* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.

Quizan, D. J. P. (2018). *MATLAB Simulation of Solar Photovoltaic Integration for Levelized Cost of Electricity (LCOE) using Genetic Algorithm* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.

- Renion, F. B. A. (2004). *Design of a fully automatic back-up power for the new Makati City Hall building* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Reyes, M. T. (2016). *250W Active Clamp Forward Converter* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Santiago, R. V. M. (2000). *Preparation of the Luzon grid daily generation schedule* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Santos, E. M. (2013). *Short Term Load Forecasting Using a Coupled Regression and Artificial Neural network model* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Sasis, T. R. S. (2007). *Temperature effect on propagation delay of CMOS logic gates using high-K gate dielectric* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Sedilla, N. V. (2007). *A proposed design of the fully automatic emergency back-up power supply (EBUPS) for St. James Academy Malabon* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Supnet, R. J. (1999). *Short-term power development plan of Ilocos Norte using spatial electric load forecast*. [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Supsup, R. C. (1997). *The short-circuit modeling of the 10-year expansion of Luzon grid (1997-2007)* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Teodoro, M. A. G. (2017). *System Development of Identifying the Primary and Backup Pairs for Directional Overcurrent Relays Using Expert Theory System* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua University.
- Tomas, S. R. L. A. (2015). *Treatment of Technical and Commercial Pmin in the Economic Dispatch of Generating Unit using Mixed-Integer Linear Programming* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Torio, R. P. (2002). *Voltage compensation of the Palawan grid using EDSA power system software* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Uy, V. S. (2014). *Application of voltage constraint in a co-optimized model for energy and reserve market* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.
- Uyvico, F. L. J. (2006). *The proposed electrical system audit for university of Perpetual Help system-DALTA Molino, Bacoor, Cavite* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Vallestero, G. C. (2015). *Renewable Source of Energy: Integration of Photovoltaic Cells and Thermoelectric Module for Power Generation* [Master' Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Ventura, E. D. (2009). *Characterization of pure and MWCNT doped BNNT as light emitter* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Villanueva, J. (1999). *Sectoral emergency and standby power supply of the Philippine Military Academy*. [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.

Villanueva, M. (2014). *Verification of tanner EDA V.16 for a full-custom IC design using three gate oscillator* [Master's Thesis, MSEE]. School of Graduate Studies, Mapua Institute of Technology.