

Course Title: Algorithm for Optimization of Engineering Process with MATLAB/ Simulink

Course Code: EEA 212

Course Background / Summary:

Genetics algorithm is one of the best tools for optimization. This course will introduce participants to how to make use of genetic algorithms for optimizing the PID gain and torque and current in parallel mode drive of four quadrants DC chopper.

Course Objectives:

- Use Genetics algorithm to optimize control application such as tuning PID controller
- Familiarize with MATLAB/Simulink as the processing engine for this Genetics Algorithm

Target Audience:

- Electricians, Research assistants, Research officers, Researchers, Academicians
- Technicians, Hobbyist
- Engineers & Instructors

Course Duration: 3 Days

Course Contents

1.0 Basic Theory for Genetics Algorithm

2.0 Basic Knowledge of Matlab/Simulink and Genetics Algorithm Optimize PID Controller using a Genetics Algorithm