



**Department of Electrical,
Computer, & Biomedical Engineering**
Faculty of Engineering & Architectural Science

COE/ELE 70AB Milestones Compliance Report (MCR)

Project Title	Python Program for Ladder Iterative Load Flow
MCR Number	I (weeks 4 & 5)
Project Manager for the MCR period	Student A: Abrar Ahsan
Team Players for the MCR period	Student B: Parham Habibi Student C: Muhammad Shirazi Student D: Rehnuba Fairoj
Faculty Supervisor	Dr Balasubramanian Venkatesh

- Tasks Outlined for the Reporting Period (e.g. MCR I – Weeks 4 & 5)** (Provide detailed information on the tasks to be completed for the reporting period as per the milestone submitted to your FLC in Week3)

Group:

- Learn load-flow calculation algorithms**
- Milestone Compliance Report 1**

Student A: Research Implementation methods for reading IEEE Data Formats in Python

Student B: Research and find methods to implement load-flow calculations, both Ladder-Iterative as well as other methods.

Student C: Research and find useful Python and Non-Python GUIs for user interaction with the system

Student D: Research and find useful Python and Non-Python GUIs for user interaction with the system

- Progress Made in Reporting Period (e.g. MCR I – Weeks 4 & 5)** (Provide detailed information on the progress that you (as a group and individual) made during the reporting period. You can include figures, datasheets, flowcharts etc. and additional information as requested by your FLC. You should use your progress to justify compliance to the tasks outlined for the reporting period as per the milestones submitted to your FLC in Week3)

Group: Went over power-flow calculation methods in the ELE746 textbook to get some basic understanding of the ask.

Student A: Found PyExcel to use to parse through data provided by user in an excel file.

Student B: Researched different methods to implement load-flow calculations, both Ladder-Iterative as well as other methods.

Student C: Researched different implementations and toolboxes for Python GUIs.

Student D: Researched different implementations and toolboxes for Python GUIs. Found online courses for Python and GUI development.

3. **Difficulties Encountered in Reporting Period** (Provide detailed information on the difficulties and issues that you encountered during the reporting period and how you plan to address this in the following periods)

Group: Still in research phase, no issues encountered.

Student A: No difficulties. Searching for data sources for load-flows calculations.

Student B: No difficulties encountered. Searching for more sources for load-flows calculations (Ladder-Iterative method).

Student C: No difficulties encountered. Trying different approaches for GUI.

Student D: No difficulties encountered. Trying different approaches for GUI. Searching for data sources for load-flows calculations.

4. **Tasks to Be Completed in the Next Reporting Period** (Outline the tasks to be completed in the next reporting period. Please note this should match with your milestones submitted to your FLC in Week3, however in consultation with (and approval of) your FLC, you can modify this to accommodate incomplete tasks from previous period. Here you should also identify the Project Manager for the next period)

Group: Research more, find more relevant papers

Student A: Implement reading module to read data from excel sheets in IEEE Data Formats. This is then to be passed onto the calculation engine.

Student B: Implement a simple ladder-iterative load-flow calculation engine, having fixed inputs and printing outputs on terminal.

Student C: Build a basic GUI that allows user interaction.

Student D: Build a basic GUI that allows user interaction. Find data sources for both development and test purposes.