This project focuses on designing a gas pipeline system as part of the Petroleum Engineering Design course. This will enable to optimize the pipeline's design for cost-effectiveness and operational efficiency. The project involves calculating various pipeline parameters like gas flow rate, pressure, and diameter using Excel VBA. A. Objective The goal is to use Excel VBA to create a gas flow simulator that can compute the pressure decrease across the pipeline. This simulator will help determine the proper compressor horsepower and pipeline diameter required to maintain the necessary gas flow rate to users.