

Name: AREEJ AHMAD

Program: ELECTRICAL ENGINEERING

Statement of purpose for PhD admission

I am a master's graduate in electrical engineering at **Tishreen University, Syria**. I am seeking admission to the PhD program in Electrical Engineering at your esteemed university, within my major in Renewable Energies Engineering. During my master's degree, I focused on Microgrids and ways to control them. Through this Statement of Purpose, I intend to personally and educate the background, research interests, objectives, and reasons for choosing your esteemed institution.

I have completed my undergraduate studies in Electrical Engineering at **Tishreen University, Syria**. During my five-year undergraduate studies (2012-2017), the excellent course structure combined with high academic standards simulated my interest in the field of renewable energies. Therefore, later in my masters, I went to study Microgrids based on distributed generators, and I focused all of my attention on control, because control is the mastermind and the main pillar in achieving electrical stability and reliability. I relied in my studies on distributed control strategy and random logic controllers. I obtained a **CGPA of 90.89% on a scale of 100**, under the supervision of **Dr. Hossam Shaheen**, Assistant Professor, Department of Electrical Power Engineering, Tishreen University, Syria.

In order to further, develop my keen interest and a deeper understanding of the field of electrical engineering. I would like to complete my studies at your esteemed institution, with the aim of developing my research and expanding the field of research, to include a multi-grid electrical system, methods of linking them, and achieving a high level of effective control over the actual energy sharing between them, as well as maintaining effort. And the frequency of all components of these networks within the permissible limits, in addition to ensuring the reliability and quality of the electrical supply, especially for the important centers in the country and achieving independence for them (hospitals - information security centers, etc.).

As part of my future PhD work, I plan to develop my work on voltage, frequency, and power sharing strategies for Microgrids, focusing on harmonic issues in particular, as they are a major concern in power distribution systems.

I chose your esteemed institution, to complete my PhD research for being internationally recognized as a leading institution in the field of engineering education and research. In addition, it has an outstanding faculty, many of whom are renowned for their research contributions at the international level. More specifically, the Department of Electrical Engineering ranks first in academics and has a very vibrant graduate program with a strong focus on research and development.