

**1. Name: Ahmed Sayed Abdelhamid Awad**, Assistant Professor, Department of Electrical Power and Machines Engineering, Higher Institute of Engineering, Elshorouk Academy.

**2. Degrees:**

- B.S. in (Electrical Power and Machines Engineering) – Higher Institute of Engineering, Elshorouk Academy, Elshorouk City, Cairo, Egypt. (2008)
- M.S. in (Electrical and control Engineering) – Arab Academy for Science & Technology & Maritime Transport (AASTMT), Egypt. (2015)
- Ph.D. in (Electrical Power and Machines Engineering) – Cairo University, Giza, Egypt. (2019).

**3. Years of Service on Faculty: 15**

- 09/2019 - present Assistant Professor.

**4. Other Experience:**

- 2018 to 2022: Manager of design and implementation department for electrical works at Capital International company – Franchise Asfour crystal.
- 20018 to 202: Projects manager at Perfect company – Franchise Asfour crystal.
- 2016 to 2018: Electrical Design Engineer at Perfect company – Franchise Asfour crystal.
- 2012 to 2017: Electrical Design Engineer at Hydro-Consult Engineering office.

**5. Consulting Activities**

- 17 electrical infrastructure sites for ministry of housing, Saudi Arabia.
- Project of technical support for studies & design of improvement entrances for holy Makkah.
- Sanitation project for Al-Aqadma village - Abu Tej Center.
- (Design, Supervision, and implementation): Asfour crystal showroom, Josip Tito, El-Nozha, Cairo, Egypt.
- (Design, Supervision, and implementation): Asfour crystal showroom, Abodawod Elzahery, Nasr city, Cairo, Egypt.
- VIP waiting hall at the Egyptian Military College, Cairo, Egypt.
- 9 churches, Assiut, Upper Egypt.
- Design review of the electrical infrastructure project of capital gardens compound, new capital, Cairo, Egypt.

**6. States in which registered:**

- Cairo, Egypt.

**7. Principal publications of last 5 years:**

- B. A.-E. Rashad, D. K. Ibrahim, M. I. Gilany, A. S. Abdelhamid, and W. Abdelfattah, “Identification of broken conductor faults in interconnected transmission systems based on discrete wavelet transform,” PLoS One, vol. 19, no. 1, p. e0296773, Jan. 2024, [Online]. Available: <https://doi.org/10.1371/journal.pone.0296773>
- R. A. Mostafa, A. Emary, A. Sayed, and M. EL-Shimy, “Impact of short-duration voltage variations on VSC-HVDC performance,” Sci. Rep., vol. 13, no. 1, p. 23055, 2023, doi: 10.1038/s41598-023-50362-3.
- R. A. Mostafa, A. E. Salem, A. S. Abdelhamid, and M. E. S. M. Bekhet, “Performance analysis of voltage source converter based high voltage direct current line under small control perturbations,” Indones. J. Electr. Eng. Comput. Sci., vol. 32, no. 3, pp. 1224–1235, 2023, doi: 10.11591/IJEECS.V32.I3.PP1224-1235.

- M. Elshahed, F. A. Al-Mufadi, and A. Sayed, “Temporary faults impact on the overall availability and reliability of practical large-scale grid-connected photovoltaic systems,” *Energy Reports*, vol. 9, pp. 5336–5349, 2023, doi: <https://doi.org/10.1016/j.egy.2023.04.353>.
- M. El-Naggar, A. Sayed, M. Elshahed, and M. EL-Shimy, “Optimal maintenance strategy of wind turbine subassemblies to improve the overall availability,” *Ain Shams Eng. J.*, vol. 14, no. 10, p. 102177, 2023, doi: <https://doi.org/10.1016/j.asej.2023.102177>.
- M. F. El-Naggar, A. S. Abdelhamid, M. A. Elshahed, and M. E.-S. M. Bekhet, “Dynamic Reliability and Availability Allocation of Wind Turbine Subassemblies Through Importance Measures,” *IEEE Access*, vol. 10, pp. 99445–99459, 2022, doi: [10.1109/ACCESS.2022.3203423](https://doi.org/10.1109/ACCESS.2022.3203423).
- M. F. El-Naggar, A. S. Abdelhamid, M. A. Elshahed, and M. El-Shimy Mahmoud Bekhet, “Ranking Subassemblies of Wind Energy Conversion Systems Concerning Their Impact on the Overall Reliability,” *IEEE Access*, vol. 9, pp. 53754–53768, 2021, doi: [10.1109/ACCESS.2021.3070533](https://doi.org/10.1109/ACCESS.2021.3070533).
- A. Sayed, M. EL-Shimy, M. El-Metwally, and M. Elshahed, “Impact of subsystems on the overall system availability for the large scale grid-connected photovoltaic systems,” *Reliab. Eng. Syst. Saf.*, vol. 196, p. 106742, 2020, doi: <https://doi.org/10.1016/j.res.2019.106742>.
- A. Sayed, M. El-Shimy, M. El-Metwally, and M. Elshahed, “Reliability, Availability and Maintainability Analysis for Grid-Connected Solar Photovoltaic Systems,” *Energies*, vol. 12, no. 7, 2019. doi: [10.3390/en12071213](https://doi.org/10.3390/en12071213).

#### **8. Scientific and professional societies of which a member**

- Egyptian Engineers Syndicate, and Egyptian Society of Engineers.

#### **9. Honors and awards:**

- Certified Electrical Consultant Engineer by the Egyptian Syndicate of Engineers, specializing in the following area “Electrical Power Distribution”.

#### **10. Institutional & professional service in last 5 years:**

- Program quality unit (as a co-leader).
- Program and courses Description Committee.
- Head of Student Training Committee.
- Research and Staff Committee.
- Exams Control Committee.
- Laboratory Specifications and Maintenance Committee.
- Exams Conduct Committee.
- Quality assurance Committee.
- Decision maker and organizer for seminars and technical sessions.

#### **11. Professional Development Activities in the last 5 years:**

- Attending many meetings, events, and conferences related to the field of Electrical Power and Machines Engineering.