Employment Opportunities

- Self-Employed – as licensed electrical contractor by PCAB, consultant
- Employed in government institutions or private corporation/power utilities company
- Research
- Academe
- Post Graduate and Master’s Degree opportunities
- In demand abroad especially in Middle East Countries
- Specific professional/Careers/Occupations for registered electrical engineers may go into:
  - Power System Engineer
  - Design Engineer
  - Automation and Process Control Engineer
  - Illumination Engineer
  - Entrepreneur
  - Sales Engineer
  - Distribution Engineer
  - Instrumentation and Control Engineer
  - Safety Engineer
  - Maintenance Engineer
  - Construction and Project Engineer
  - Software Developer
  - Electrical Design Inspector

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Electrical Engineering

The electrical engineering profession deals with the generation, transmission, distribution, and utilization of electricity. It includes design, operation, protection, maintenance, control and economics of electrical systems with emphasis on ethical values to harness economically and safely the materials, and forces of nature for the benefit of society and the environment.

Functions

The scope of practice of electrical engineering involves the following:

- Consultation, investigation, valuation and management of services requiring electrical engineering knowledge;
- Designs and preparation of plans, specifications, and estimates for electric power systems, power plants, power distribution systems including power transformers, transmission lines and network protection, switchgear, building wiring, electrical machines, equipment, and other;
- Supervision of erection, installation, testing and commissioning of power plants, substations, transmission lines, industrial plants and others;
- Supervision of operation and maintenance of electrical equipment in power plants, industrial plants, watercrafts, electric locomotives and others;
- Supervision of the manufacture and repair of electrical equipment including switchboards, transformers, generators, motors, apparatus and others;
- Teaching of electrical engineering professional subjects ; and
- Taking charge of the sale and distribution of electrical equipment and systems requiring engineering calculations or applications of engineering data.

Skills and Competencies

A graduate of the Bachelor of Science in Electrical Engineering (BSEE) program must attain:

- An ability to apply knowledge of mathematics and science to solve engineering problem
- An ability to design and conduct experiments, as well as to analyze and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability, in accordance with standards
- An ability to function on multi-disciplinary teams
- An ability to identify, formulate, and solve engineering problems
- An understanding of professional and ethical responsibility
- An ability to communicate effectively
- The broad education necessary to understand the impact of engineering solutions in a global and societal context
- Recognition of the need for, and an ability to engage in life-long learning
- A knowledge of contemporary issues
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Basic Educational Requirement

A degree holder in Bachelor of Science in Electrical Engineering from a university, school, college, academy or institute duly constituted, recognized and accredited by the Philippine government, as the minimum academic requirement. The practice of electrical engineering profession requires a license from the Professional Regulation Commission thru the Board of Electrical Engineering.

Cost of Education

In a state/public universities, a course in Bachelor of Science in Electrical Engineering (BSEE) is approximately P 200,000 to P350,000 for the whole course while for private institutions and universities, the cost of education may range from P 400,000 to P 800,000.