

# **PROGRAMME EDUCATIONAL OBJECTIVES (PEO)**

## **DEPARTMENT OF ELECTRICAL ENGINEERING**

### **PEO I :**

**Our graduates will be productive in the professional practice of electrical engineering, related fields and higher education. They will obtain employment appropriate to their background, interests, and education and will advance in their career.**

### **PEO II :**

**Have the mathematical and scientific knowledge to analyze and solve emerging real world problems related to power system, control systems, power electronics, measurement and instrumentation system, signal processing and communication systems, and are demonstrating that they possess the necessary communication, organization and teamwork skills for bridge the divide between advanced technology and end users in the practice of electrical engineering.**

### **PEO III :**

**Exhibit professionalism, ethical attitude, sense of responsibility in their profession and adapt to current trends by engaging in lifelong learning or in service to society.**

# **PROGRAMME OUTCOMES (POs)**

## **DEPARTMENT OF ELECTRICAL ENGINEERING**

- a. Graduates will demonstrate an ability to apply knowledge of computer science and engineering, mathematics, probability and statistics as it applies to the field of computer engineering including software and hardware.**
- b. Graduates will demonstrate in depth knowledge of topics which are critical to system level design, including both hardware and software design and hardware/software tradeoffs such as 1) Computational Programming and Software Design: Ability in Simulating Softwares like MATLAB, PSCAD, PSIM, PLC, and computer programming, including data structures and algorithms using representative programming languages; 2) Systems Components and Design: Proficiency in the topics necessary to design combined hardware/software systems, including power system plants design and architecture, HVDC, Power electronics control of electric motors, FACTS devices, operating system kernels, measurements and instrumentations, and the interdependencies among these topics; 3) Digital Logic and Technologies: Proficiency in digital logic design, including logic families, DSP, PSPICE, PLCs, SCADAs and contemporary digital technology; etc.**
- c. Graduates will demonstrate the ability to function as a member of engineering and science laboratory teams, as well as on multidisciplinary design teams.**
- d. Graduates will demonstrate the ability to learn and work independently to identify and solve Computer Science and engineering related problems.**
- e. Graduates will demonstrate an understanding of professional and ethical responsibilities.**
- f. Graduates will possess effective communication skills both orally and in writing.**
- g. Graduates will have the confidence and potential to apply engineering solutions in global and social contexts.**
- h. Graduates will be disciplined and will show the capabilities of independent problem solving, self learning and innovation.**
- i. Graduates will be truly educated and will have a point of view regarding global scenario of the impact of electrical engineering on society and will demonstrate awareness of contemporary issues at large.**