

## **Department of Electrical and Electronics Engineering**

### **B.Tech - Electrical and Electronics Engineering**

#### **PROGRAM EDUCATIONAL OBJECTIVES (PEOS):**

The Graduates of Electrical and Electronics Engineering program will

- I. Excel in chosen career and/or higher education with technical competence
- II. Demonstrate multidisciplinary skills and professional ethics in relating engineering issues to broader societal context
- III. Work effectively as an individual and team member with good managerial and
- IV. Engage in lifelong learning to maintain and enhance professional skills communication skills

#### **PROGRAM SPECIFIC OUTCOMES (PSOS):**

The graduate will be able to

- i. Apply mathematics, basic sciences and electrical engineering fundamentals to solve technical problems with the background of multi-disciplinary knowledge.
- ii. Identify, formulate, research literature and analyze complex electrical and electronics engineering problems attaining reasonable conclusions using fundamentals of mathematics, basic and engineering sciences.
- iii. Design solutions for complex electrical and electronics engineering problems and the process to attain the specified solutions with societal, environmental and safety considerations
- iv. Create, select and apply modern tools to carry out complex electrical and electronics engineering activities with an understanding of the limitations

## **PROGRAM OUTCOMES (POS):**

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- a. Apply mathematics, basic sciences and electrical engineering fundamentals to solve technical problems with the background of multi-disciplinary knowledge.
- b. Identify, formulate, research literature and analyze complex electrical and electronics engineering problems attaining reasonable conclusions using fundamentals of mathematics, basic and engineering sciences.
- c. Design solutions for complex electrical and electronics engineering problems and the process to attain the specified solutions with societal, environmental and safety considerations
- d. Bring out alternate solutions using research based knowledge and methodology
- e. Create, select and apply modern tools to carryout complex electrical and electronics engineering activities with an understanding of the limitations
- f. Apply contextual knowledge in professional engineering practice to enhance the society in the aspects of economy, health, safety, legal and culture.
- g. Understand the impact of engineering solutions on the environment to mitigate any ill effects and ensure sustainability of the solutions arrived.
- h. Apply ethical principles and commit to professional ethics, responsibilities and norms of the engineering practice
- i. Function effectively as an individual and as a member or leader in diverse and multi disciplinary teams
- j. Communicate effectively on complex engineering activities with the engineering community and with society at large
- k. Administer and regulate projects subjected to financial personnel and time constraints
- l. Engage in lifelong learning to adopt or develop the technological advancements to meet the growing and changing societal needs