

# MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

(Affiliated to JNTU, Hyderabad, Approved by AICTE - Accredited by NBA & NAAC – 'A' Grade - ISO 9001:2015 Certified) Maisammaguda, Dhulapally (Post Via. Kompally), Secunderabad – 500100, Telangana State, India.

# **DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

# M.TECH – VLSI & EMBEDDED SYSTEMS

## PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

### PEO 1: TECHNICAL ACCOMPLISHMENTS

To pursue career in VLSI and Embedded Systems domain through state of the art learning and self directed approach on cutting edge technologies converging to substantial research work.

### **PEO 2: PROFESSIONAL DEVELOPMENT**

To develop managerial skill and apply creative approaches in the domains of VLSI and Embedded Systems by incorporating automation, power consumption, miniaturization, sustainability leading to become a successful professional or an Entrepreneur.

## PROGRAM SPECIFIC OUTCOMES (PSOs)

### **PSO 1.**

To acquire competency in areas of VLSI and Embedded Systems, Design, Testing, Verification IC Fabrication and prototype development with focus on applications.

## PSO 2.

To integrate multiple sub-systems to develop System on Chip, optimize its performance and excel in industry sectors related to VLSI/ Embedded domain and to develop a start-up system.

# **PROGRAM OUTCOMES (POs)**

#### PO 1: RESEARCH SKILL

An ability to independently carry out research /investigation and development work to solve practical problems

### **PO 2: SOFT SKILLS**

An ability to write and present a substantial technical report/document

### PO 3: SCHOLARSHIP OF KNOWLEDGE

Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

## PO 4: PROBLEM SOLVING

Think laterally and originally, conceptualize and solve technical problems, evaluate a wide range of potential solutions for those problems and arrive at feasible, optimal solutions after considering public health and safety, cultural, societal and environmental factors in the core areas of expertise.

## PO 5: COLLABORATIVE AND MULTIDISCIPLINARY WORK

Possess knowledge and understanding of group dynamics, recognize opportunities and contribute positively to collaborative-multidisciplinary scientific research, demonstrate a capacity for self-management and teamwork, decision-making based on open-mindedness, objectivity and rational analysis in order to achieve common goals and further the learning of themselves as well as others.

## PO 6: ETHICAL PRACTICES AND SOCIAL RESPONSIBILITY

Acquire professional and intellectual integrity, professional code of conduct, ethics of research and scholarship, consideration of the impact of research outcomes on professional practices and an understanding of responsibility to contribute to the community for sustainable development of society.

