



Rajiv Gandhi University of Knowledge Technologies

(Telangana Government Act 8 of 2016)

Basar, Nirmal, Telangana State – 504107, India.

ELECTRONICS AND COMMUNICATION ENGINEERING

PROGRAMS OFFERED

The Department of ECE, offers two course for the Undergraduate and Post Graduate Level to emphasize and illuminate Future Engineers by having competence at acquiring knowledge in the fields of Industrial Electronics, Signal Processing, Communication systems and Machine Learning.

The regular course programs like DSD, IOT, Pattern Recognition and advanced Communication system domains will initiate and make the undergraduates to develop fascination to work in the more sophisticated fields of Semi conductors, Embedded Technologies, Wireless communications. The Post Graduate scheme emphasize on in depth view and study of various sub domains not limited to Electronics, Embedded systems, Communication fields but also urges a thirst for the application oriented learning & research with Artificial intelligence domains.

Apart from conventional class room teaching, Students here are suggested to undertake courses in some emerging trends of technologies, also entertains them to choose any Course that helps to get their careers in their Dream Industries offered by NPTEL MOOCS which will be in credit transfer mode and COURSERA Platforms

Frequent forums will be held by The Academic Planning Committee members of the Department to Discuss and execute the changes and Up gradation in the curriculum if required in accordance with the needs of the ongoing trends in Industries.

After successful completion of the program, the Graduates will be equipped with ethics and panoramic view on subjects and are enough competent to explore themselves in various sectors of science and technologies

S No.	Program offered	Duration
1	B Tech	Four years
2	M Tech	Two years

The Program Educational Objectives (PEOs)

PEO-1: To learn and acquire a strong background in Fundamentals of basic sciences for engineering applications.

PEO-2: To make student proficient in technical, computational, and soft skills for a successful career in academic, industry or research organizations.

PEO-3: To expose the students to the advances in technologies and research in electronics, communications, information technologies, and other related areas.

PEO-4: To embed team spirit, professional ethics and moral values for betterment of society.

Program Outcomes (POs)

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSO)

PSO-1: An ability to understand the concepts of basic Electronics & Communication Engineering and to apply them to various areas like Signal processing, VLSI, Embedded systems, Communication Systems, Digital & Analog Devices, etc.

PSO-2: An ability to solve complex Electronics and Communication Engineering problems, using latest hardware and software tools, along with analytical skills to arrive cost effective and appropriate solutions.

PSO-3: Wisdom of social and environmental awareness along with ethical responsibility to have a successful career and to sustain passion and zeal for real-world applications using optimal resources as an Entrepreneur.