

PROGRAM GOAL
ELECTRONICS AND COMMUNICATION ENGINEERING
DIPLOMA PROGRAM

Goal:

To provide our graduates an integrated educational experience that develops their ability to apply pertinent knowledge to solving problems in the engineering technology specialty. To prepare our students for immediate employment, and provide them with the sufficient foundation to continue upper-division studies.

PROGRAM OBJECTIVES
ELECTRONICS AND COMMUNICATION ENGINEERING
DIPLOMA PROGRAM

The program should enable the student to:

1. Contribute to society in a broad range of careers
2. Flourish professionally in an increasingly international and rapidly changing world
3. Effectively build, test, operate, and develop modern telecommunications systems
4. Develop skills for clear communication and responsible teamwork, and to inculcate professional attitudes and ethics, so that one is prepared for the complex modern work environment
5. Acquire sufficient breadth and depth for successful subsequent graduate study, post-graduate study, or lifelong learning
6. Develop and apply critical thinking skills, enhancing the ability to address unstructured problems specific to technical specialties in telecommunication engineering
7. Acquire technical and managerial skills necessary to enter careers in the design, application, and/or maintenance of telecommunication systems

PRORGAM OUTCOMES
ELECTRONICS AND COMMUNICATION ENGINEERING
DIPLOMA PROGRAM

The graduate should have the ability to:

1. Demonstrate an appropriate mastery of the knowledge, techniques, skills, and tools of modern engineering, including the use of modern computer-based technologies such as the writing of programs, the use of professional software, and the use of modern electronic media, effectively in the practice of telecommunication engineering
2. Apply knowledge of:
 - a. Science and engineering to the analysis of the performance of telecommunication engineering processes and systems
 - b. Foundation mathematics, including basic calculus, and linear algebra, in support of telecommunication systems.
3. Design and conduct experiments in telecommunication engineering, make engineering measurements, analyze and interpret data.
4. Apply telecommunications principles, electronics, computer programming, and software skills in the solution of telecommunications problems
5. Function effectively on multidisciplinary teams involving people from diverse backgrounds
6. Identify and address problems in telecommunication engineering by extending the concept of simple building blocks to system level design
7. Communicate effectively through a series of peer and faculty reviews, to include oral and written reports
8. Employ study skills and computer knowledge for lifelong learning for a successful career in telecommunication engineering
9. Demonstrate knowledge of the professional and ethical responsibilities incumbent upon the practicing telecommunication technician
10. Demonstrate the knowledge of contemporary global and societal issues and their relationship to professional ethics and engineering solutions
11. Demonstrate commitment to quality, timeliness, and continuous improvement

