



Sardar Patel Institute of Technology
Munshi Nagar Andheri (West), Mumbai - 400058
Electronic and Telecommunication Engineering Department
Academic Year: 2021-2022

Learning Outcomes Through Project Work

Please rate on a scale of 1 to 3. (1= Slight, 2= Moderate, 3= Substantial)

Learning Outcomes	Rating (1 to 3)			
	Self Evaluation	Internal Examiner	External Examiner	Other Academic /Industry Expert
Engineering Knowledge	2	3	3	3
Problem Analysis	2	2	2	2
Design & Development of Solutions	2	3	2	3
Investigation of Complex Problem	3	3	3	3
Modern Tools Usage	3	3	3	3
Engineer and Society	2	2	2	2
Environment & Sustainability	1	2	2	2
Ethics	3	3	3	3
Individual & Teamwork	3	3	3	3
Communication	3	3	3	3
Project management & Finance	2	2	2	2
Lifelong Learning	2	2	2	2
Troubleshoot electronic circuits, systems and products	1	2	2	2
Use open-source tools	3	3	3	3
Draft patent and research paper	3	3	3	3

Name and Signature of Students:

1. Kaustubh Venkatesh

2. Gokul Nair

3. Arseta Singh

Name and Signature of Internal Examiner: _____

Name and Signature of External Examiner: _____

Name and Signature of other Academic /Industry Expert:



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VISION

To produce Telecommunication Engineers capable of effectively using the scientific and technical knowledge for the betterment of society.

MISSION

- Provide **high-quality teaching, state-of-the-art research** and creative activity to acquire innovation and next-generation technologies.
- **Develop** educational and career goals, **decision-making skills** and job search strategies needed to manage their professional and academic pursuits.
- **Promote interaction** and exchange **with industry** and other institutions of higher learning.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

The Bachelor of Engineering in Electronics and Telecommunication program has following educational objectives. These objectives are the long term career goals that we set for our students. Our program prepares students to achieve these objectives, four to five years after graduation. Graduates **establish** themselves in their **chosen career paths** by utilizing technical, leadership, communication and interpersonal skills, while complying with ethical standards. Graduates, through their excellence, contribute towards the next generation of telecommunication by **engaging in Research and Development**. Graduates demonstrate personal growth by pursuing or successfully **completing advanced degrees and professional development courses** in the field of engineering.

The outcomes of the program objectives are:

- **Engineering Knowledge:** The ability to apply knowledge of mathematics, engineering and science to solve complex engineering problems.
- **Problem Analysis:** The ability to identify, formulate and analyze engineering problems.
- **Design/development of Solutions:** The ability to design a system, component, or process to meet desired needs within realistic constraints such as environmental, social, ethical.
- **Conduct Investigations of Complex Problems:** Ability to conduct investigation of complex problems and find appropriate solution leading to valid conclusion.
- **Modern Tool usage:** An ability to use the techniques, skills, and modern engineering tools necessary for telecom engineering practice.
- **The Engineer and Society:** Ability to be aware of societal, health, safety, cultural, legal issues and responsibilities relevant to professional engineering practice.
- **Environment and Sustainability:** The broad education necessary to understand the impact of engineering solutions in environmental and societal context.
- **Ethics:** Apply professional ethics to engineering practices.
- **Individual and Team Work:** The ability to function in multi-disciplinary teams by involving in technical activities.
- **Communication:** The ability to comprehend, present and document effectively.
- **Project Management and Finance:** Ability to apply engineering and management principles.
- **Life-long Learning:** The ability to engage in lifelong learning with advances in technology.

Program specific Objectives

- 1.The ability to analyze, optimize and troubleshoot LAN, optical and mobile networks.
- 2.The ability to analyze, design and implement Embedded systems using open source tools
- 3.The ability to design and develop next generation technologies.

Course Educational Objectives: (Sem-VII)

CEO 1	To enable students to explore a wide range of topics, give an opportunity for innovation, search for the professional literature and apply the problem-solving approaches.
CEO 2	To help students in setting project goals and utilization of the available resources in terms of faculty, staff, library, laboratory, etc. in an optimum manner.
CEO 3	To develop managerial skills in students while working in a team, creative skills by demonstrating novel engineering solutions, communication skills while presenting their end application and an awareness of social and ethical ramifications of their work.
CEO 4	To teach writing a technical document and help students to represent the professional literature.

Course Learning outcomes: (Sem-VII)

CO1	Ability to acquire the thinking pattern which explores wide range of topics for innovation
CO2	Ability to learn the technique of analysis, classification and then selection of appropriate literature.
CO3	Ability to learn the methodology to apply the problem solving approaches.
CO4	Ability to learn to communicate effectively with others to discuss technical, social needs and find an engineering solution.
CO5	Ability to develop skills for writing a technical document.
CO6	Ability to practicing to maintain and prepare a Project Report/ Synopsis Report of the work done as an evidence of an ability to work independently and in a group for the given task

Course Educational Objectives: (Sem-VIII)

CEO 1	To train students to apply the scientific methods and the problem solving approaches studied in earlier courses to meet the project goals with the use of advanced software tools, applications and hardware tools.
CEO 2	To help students in utilization of the available resources in terms of faculty, staff, library, laboratory etc. in an optimum manner.
CEO 3	To develop managerial skills in students while working in a team, creative skills by demonstrating novel engineering solutions, communication skills while presenting their end application and an awareness of social and ethical ramifications of their work.
CEO 4	To teach writing a technical document and help students to represent the professional literature.

Course Learning outcomes: (Sem-VIII)

CO1	Ability to learn the methodology to apply the problem solving approaches.
CO2	Ability to communicate effectively with others to discuss technical, social needs and find an engineering solution.
CO3	Ability to develop skills for writing a technical document.
CO4	Ability to learn and practice to maintain and prepare a Project Report/Synopsis Report of the work done as evidence of an ability to work independently and in a group for the given task.
CO5	Ability to prove themselves with performance with emphasis on effort, organization, creativity and initiative
CO6	Ability to enhance employability through the evidence of independent work.