

**Faculty of Engineering  
Teerthanker Mahaveer University**

**B.Tech. (Electronics and Communication Engineering)**

**Programme Outcome**

<b>PO-1</b>	:	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
<b>PO-2</b>	:	Problem analysis & Solving: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
<b>PO-3</b>	:	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.
<b>PO-4</b>	:	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.
<b>PO-5</b>	:	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
<b>PO-6</b>	:	Social Interaction & effective citizenship: 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.
<b>PO-7</b>	:	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.
<b>PO-8</b>	:	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
<b>PO-9</b>	:	Attitude (Individual and team work): Function effectively as an individual, and as member or leader in diverse teams, and in multidisciplinary settings.
<b>PO-10</b>	:	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 clean instructions.
<b>PO-11</b>	:	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.
<b>PO-12</b>	:	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.
<b>PO-13</b>	:	Entrepreneurship: An Entrepreneurship cut across every sector of human life including the field of engineering, engineering entrepreneurship is the process of harnessing the business opportunities in engineering and turning it into profitable commercially viable

		innovation.
<b>PO-14</b>	:	Interpersonal skills: Interpersonal skills involve the ability to communicate and build relationships with others. Effective interpersonal skills can help the students during the job interview process and can have a positive impact on your career advancement.
<b>PO-15</b>	:	Technology savvy/usage: Being technology savvy is essentially one's skill to be smart with technology. This skill reaches far beyond 'understanding' the concepts of how technology works and encompasses the 'utilization' of such modern technology for the purpose of enhancing productivity and efficiency.

### Programme Specific Outcome

<b>PSO-1</b>	:	Understanding the concepts of basic sciences, humanities and core technical courses of Electronics & Communication Engineering.
<b>PSO-2</b>	:	Applying the skills to identify, formulate, design and investigate complex engineering problems of real time projects in the field of electronics and communication engineering in analog, digital and hybrid system domains
<b>PSO-3</b>	:	Applying the acquired hardware and software knowledge to research and industrial practices while acquiring soft skills like persistence, proper judgment through these projects-based interactions.
<b>PSO-4</b>	:	Analysing the applications of core engineering concepts in the field of communication/networking, signal processing, embedded systems and semiconductor technology.
<b>PSO-5</b>	:	Evaluating various electrical, electronics and communication systems consisting of electrical and electronic components through analytical knowledge in Electronics & Communication Engineering with the help of modern tools.
<b>PSO-6</b>	:	Creating hands on experiences and exposure in the field of Solar System, Microcontroller, PCB Designing and IoT, etc.

### Course Outcomes

<b>EHM613</b>	<b>CO-1</b>	Understanding the importance of value education in life and method of self-exploration.
	<b>CO-2</b>	Understanding 'Natural Acceptance' and Experiential Validation as the mechanism for self-exploration.
	<b>CO-3</b>	Applying right understanding about relationship and physical facilities.
	<b>CO-4</b>	Analysing harmony in myself, harmony in the family and society, harmony in the nature and existence.
	<b>CO-5</b>	Evaluating human conduct on ethical basis.